



TETRA TECH

RECEIVED JUN 04 2010

May 12, 2010

Mr. Mike Bratcher
Environmental Engineer Specialist
Oil Conservation Division, District 2
1301 West Grand Avenue
Artesia, NM 88210

Re: Assessment and Closure Report – for the COG Operating, LLC, Skelly #942 Tank Battery Facility, Located in Unit Letter B, Section 22, Township 17 South, Range 31 East, Eddy County, New Mexico.

Mr. Bratcher:

Tetra Tech, Inc. was contacted by COG Operating, LLC to investigate the two (2) spills that occurred at the Skelly #942 Tank Battery. The tank battery is located in Unit Letter B, Section 22, Township 17 South, Range 31 East, Eddy County, New Mexico. The site coordinates are N 32° 49.482', W 103° 51.340. The Site is shown on Figures 1 and 2.

Background

Spill #1, 11/12/09

The spill occurred on November 12, 2009, when the safety gauges float malfunctioned, causing the production tank to overflow. An estimated 170 barrels of oil were spilled with 160 barrels recovered with a vacuum truck. The spill was fully contained within the facility firewall. The spill location is shown on Figure 3. The C-141 (initial) is included in Appendix A.

Spill #2, 12/27/09

On December 27, 2009, the water meter on the heater plugged, which overran the equalizers. An estimated 38 barrels of oil were spilled with 35 barrels recovered with a vacuum truck. The spill was fully contained within the facility firewall. However, the spill migrated into an open excavation from the first spill. The spill location is shown on Figure 3. The C-141 (initial) is included in Appendix A.

Tetra Tech

1910 North Big Spring, Midland, TX 79705

Tel 432.682.4559

Fax 432.682.3946

www.tetrattech.com

2 RP-347



Groundwater and Regulatory

According to the NMOCD groundwater map, the depth to groundwater in this area is greater than 300' below surface. The Geology and Groundwater Resources of Eddy County, New Mexico (Report 3) did show one well located in Section 34 with a reported depth to groundwater of 271'. The groundwater data is enclosed in Appendix B.

A risk-based evaluation was performed for the Site in accordance with the NMOCD Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene and xylene). Based on the regional groundwater data, the proposed RRAL for TPH is 5,000 mg/kg.

Assessment and Corrective Action

On November 18, 2009, Tetra Tech personnel inspected the facility. Prior to sampling, COG had scraped approximately 6" of impacted soil from inside the tank battery. A total of eight (8) auger holes were installed using a stainless steel hand auger. Select samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chlorides by EPA method 300.0. The laboratory reports are shown in Appendix C. The results are summarized in Table 1.

Referring to Table 1, the samples in AH-1 through AH-6 did showed elevated BTEX above the RRAL. The TPH concentrations were all below the RRAL of 5,000 mg/kg. In addition, the chloride concentrations did show a shallow impact to the soil from 1.0' to 3.0' below surface.

On December 15, 2009, Tetra Tech supervised the excavation of these soils to depths ranging from 1.0' to 3.5' to remove the elevated BTEX and chlorides above the RRAL. Once completed, confirmation samples were collected from these areas. As shown in Table 1, all the samples were below the RRAL for BTEX. The excavated soil was hauled to proper disposal. The sample locations and spill area are shown on Figure 3.

On December 27, 2009, a second spill occurred and migrated into the open excavation near AH-2 and measure 10' x 30' at a depth of 3.0'. On January 12, 2010, Tetra Tech installed one auger hole to assess the spill to a depth of 3.5' below excavation bottom. Referring to Table 2, the BTEX concentrations were above the RRAL were not defined. A backhoe trench was installed on January 13, 2010, to vertically define the impacted area to a depth of 7.0' below excavation bottom, which showed BTEX concentrations below the reporting limits. Based on the results, the area



TETRA TECH

was excavated down to 7.0' below excavation bottom to remove the soil above the RRAL. The excavated soil was transported to proper disposal. The area was then backfilled with clean soil. The sample locations and spill areas are shown on Figure 3. Copies of the laboratory reports and chain of custody documents are included in Appendix C.

Closure Request

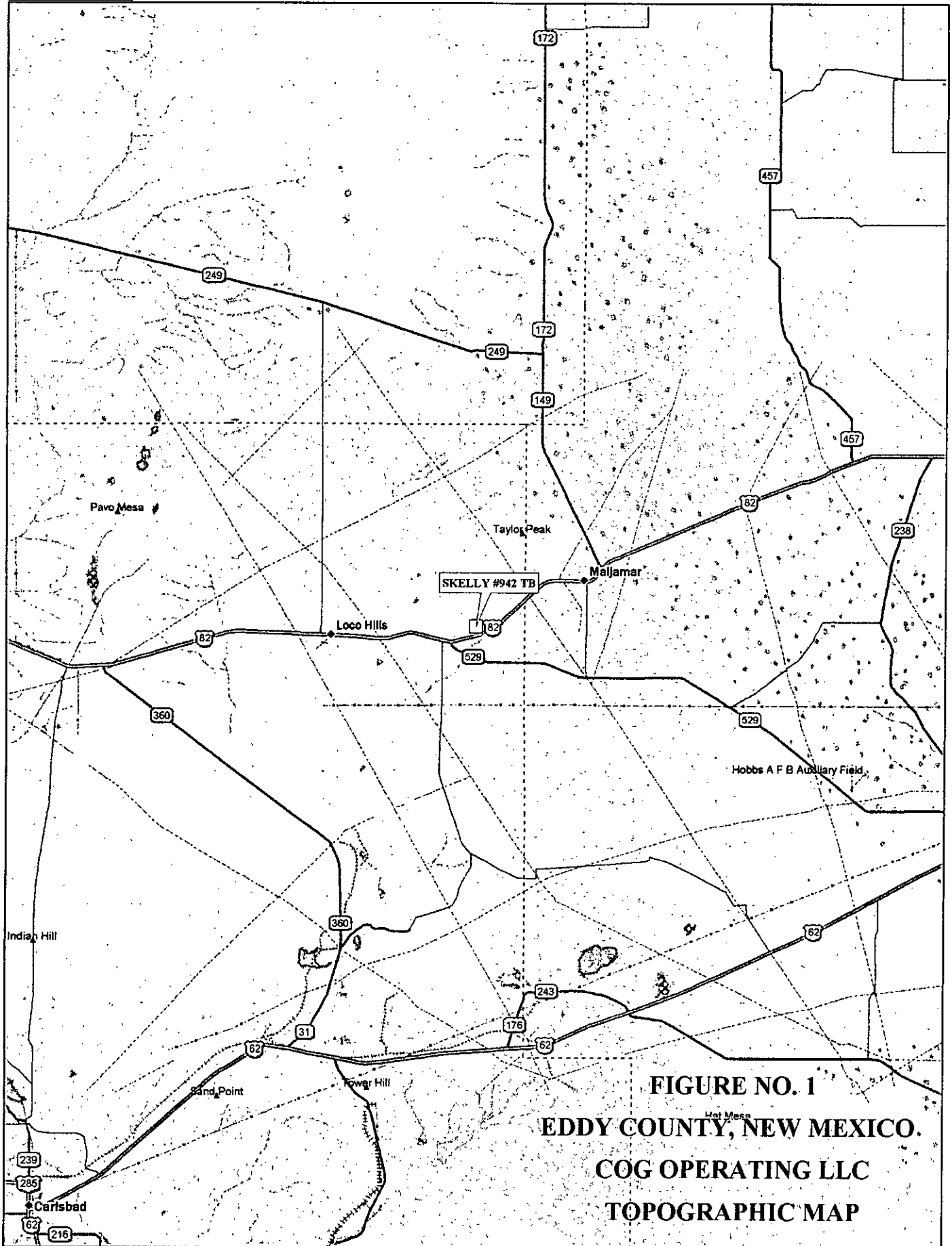
Based upon the results of the investigation and remediation performed at this site, COG Operating LLC requests closure of this site. The C-141 (Final) is included in Appendix A. If you have any question or comments concerning the assessment or the activities performed at the Site, please call me at (432) 682-4559.

Respectfully submitted,
Tetra Tech Inc.

Ike Tavaréz P.G.
Senior Project Manager

cc: Pat Ellis - COG

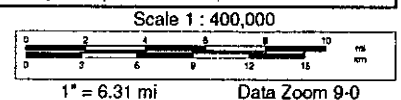
FIGURES

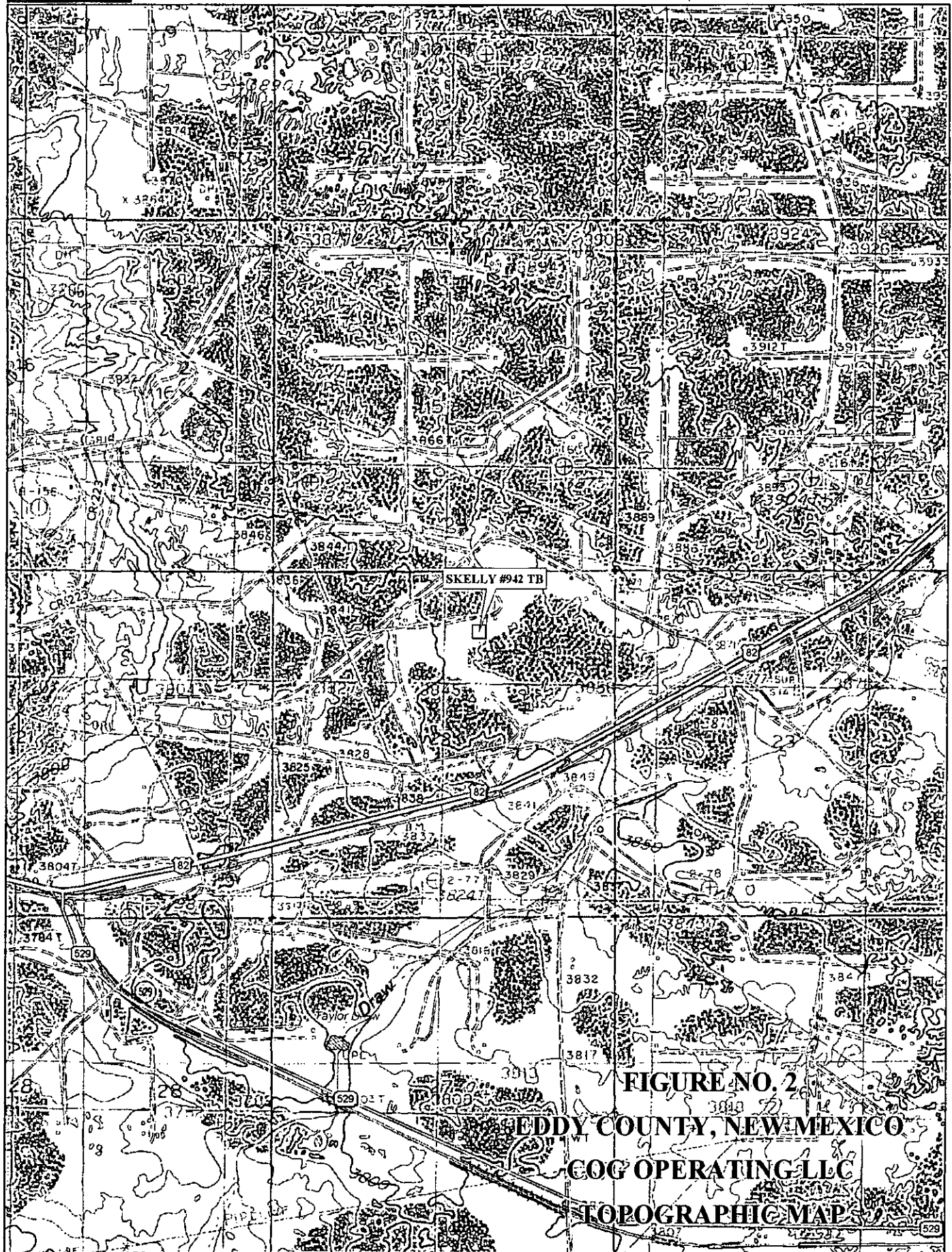


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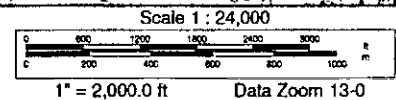




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EDDY COUNTY, NEW MEXICO

COG OPERATING

SKELLY #842 TB

**TETRA TECH, INC.
MIDLAND, TEXAS**

DATE: 11/20/09

DOWN BY:

FILE: 44-38861-1003

NOT TO SCALE

- ☒ SPILL & EXCAVATED AREA (SPILL #1)
☒ SAMPLE TRENCH
☒ SPILL & EXCAVATED AREA (SPILL #2)
☒ AUGER HOLE SAMPLE LOCATIONS

TABLES

Table 1
COG Operating LLC.
SKELLY 942
Spill #1
EDDY COUNTY, NEW MEXICO

Sample ID	Date Sampled	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-1	11/18/2009	0-1'	6"		X	1,180	1,830	3,010	2.11	35	38.4	46.4	2,340
		1-1.5'	6"	X	X	-	-	-	-	-	-	-	784
		2-2.5'	6"	X		-	-	-	<0.0100	<0.0100	<0.0100	<0.0100	837
		3-3.5'	6"	X		-	-	-	-	-	-	-	1,370
CS-1	12/15/2009	0-1'	1'	X		-	-	-	<0.0100	<0.0100	<0.0100	0.205	-
AH-2	11/18/2009	0-1'	6"		X	3,180	1,110	4,290	-	-	-	-	2,560
		1-1.5'	6"		X	-	-	-	-	-	-	-	<200
		2-2.5'	6"		X	-	-	-	2.36	61.90	61.10	6.94	<200
		3-3.5'	6"		X	-	-	-	0.69	28.00	36.30	45.60	<200
		4-4.5'	6"	X		-	-	-	-	-	-	-	224
CS-2	12/15/2009	0-1'	3'	X		-	-	-	<0.0100	<0.0100	<0.0100	<0.0100	-
AH-3	11/18/2009	0-1'	6"		X	2,980	1,160	4,140	20.8	102	76.4	79.2	3,290
		1-1.5'	6"	X	X	-	-	-	-	-	-	-	<200
		2-2.5'	6"	X		-	-	-	<0.0100	0.2	1.54	3.13	<200
		3-3.5'	6"	X		-	-	-	-	-	-	-	<200
CS-3	12/15/2009	0-1'	1'	X		-	-	-	0.668	12.6	9.44	18.4	-

Table 1
COG Operating LLC.
SKELLY 942
Spill #1

EDDY COUNTY, NEW MEXICO

Sample ID	Date Sampled	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-4	11/18/2009	0-1'	6"		X	1,200	558	1,758	3.4	38.4	39.7	40	1,350
		1-1.5'	6"		X								1,760
		2-2.5'	6"	X					<0.0100	<0.0100	<0.0100	<0.0100	<200
		3-3.5'	6"	X									<200
		4-4.5'	6"	X									<200
CS-4	12/15/2009	0-1'	1.5'	X					<0.0100	0.0641	0.39	0.741	-
AH-5	11/18/2009	0-1'	6"		X	2,520	1,770	4,290	1.68	53.2	73.8	79.9	849
		1-1.5'	6"	X									<200
		2-2.5'	6"	X					<0.0100	<0.0100	<0.0100	<0.0100	<200
		3-3.5'	6"	X									<200
CS-5	12/15/2009	0-1'	1'		X				4.02	58	74	82.5	-
AH-6	11/18/2009	0-1'	6"		X	3,130	1,100	1,758	3.49	75.2	78.3	90.7	1,090
		1-1.5'	6"	X									<200
		2-2.5'	6"	X					<0.0100	<0.0100	<0.0100	<0.0100	<200
		3-3.5'	6"	X									<200
CS-6	12/15/2009	0-1'	1'						0.14	11.3	18.6	19.2	-

Table 1
COG Operating LLC.
SKELLY 942
Spill #1
EDDY COUNTY, NEW MEXICO

Sample ID	Date Sampled	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-7	11/18/2009	0-1'	6"		X	146	226	372	-	-	-	-	883
		1-1.5'	6"		X	-	-	-	-	-	-	-	2,950
		2-2.5'	6"		X	-	-	-	-	-	-	-	3,010
		3-3.5'	6"		X	-	-	-	-	-	-	-	482
		4-4.5'	6"	X		-	-	-	-	-	-	-	<200
CS-7	12/15/2009	0-1'	3'	X		-	-	-	<0.0100	<0.0100	<0.0100	<0.0100	
AH-8	11/18/2009	0-1'	6"		X	111	170	281	-	-	-	-	1,110
		1-1.5'	6"	X		-	-	-	-	-	-	-	<200
		2-2.5'	6"	X		-	-	-	-	-	-	-	361
	11/18/2009	3-3.5'	6"	X		-	-	-	-	-	-	-	422
CS-8	12/15/2009	0-1'	1'	X		-	-	-	<0.0100	0.29	1.86	1.72	-

☐ Impacted soil excavated and hauled to disposal
(-) Not Analyzed

Table 2
COG Operating LLC.
SKELLY 942
Spill #2
EDDY COUNTY, NEW MEXICO

Sample ID	Date Sampled	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
2nd Spill (12/27/09) - migrated into open excavation from first spill in area of AH-2													
AH-1	1/12/2010	0-1'	3'	X				-	268	594	323	342	
		3.3.5	3'	X				-	87.2	246	146	153	
T-1	1/13/2010	6'	3'	X				-	3.37	39.9	34.9	37.9	
		7'	3'	X				-	<0.01	<0.01	<0.01	<0.01	

☐ Impacted soil excavated and hauled to disposal
(-) Not Analyzed

APPENDIX A

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

(Spill #1)

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	COG OPERATING LLC	Contact	Chasity Jackson
Address	550 W. Texas, Suite 1300 Midland, TX 79701	Telephone No.	432-686-3087
Facility Name	Skelly Unit 942	Facility Type	Battery

Surface Owner	Federal	Mineral Owner		Lease No.	30-015-34645
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	22	17S	31E	1210	North	2195	East	Eddy

Latitude

Longitude

NATURE OF RELEASE

Type of Release-Oil	Volume of Release-170bbls	Volume Recovered- 160bbls
Source of Release- Production tank	Date and Hour of Occurrence- 11/12/09 Approx AM	Date and Hour of Discovery 11/12/09 Approx AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Terry Gregston BLM Mike Bratcher OCD	
By Whom? Rick Wright	Date and Hour 11/12/09 in the AM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

A safety gauge float malfunctioned causing the production oil tank to run over. The safety gauge has been repaired.

Describe Area Affected and Cleanup Action Taken.*

The area inside the dyke has been cleaned but not backfilled. Tetra Tech will sample the spill site area to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD/BLM for your approval prior to any significant remediation work.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>C. Jackson</i>		OIL CONSERVATION DIVISION	
Printed Name: Chasity Jackson		Approved by District Supervisor:	
Title: Agent for COG		Approval Date:	Expiration Date:
E-mail Address: cjackson@conchoresources.com		Conditions of Approval:	
Date: 11/17/09 Phone: 432-686-3087		Attached ☐	

Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

#2
Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	COG OPERATING LLC	Contact	Kanicia Carrillo
Address	550 W. Texas, Suite 1300 Midland, TX 79701	Telephone No.	432-685-4332
Facility Name	Skelly Unit 942	Facility Type	Battery
Surface Owner	Federal	Mineral Owner	
		Lease No.	NMLC-029419A

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	22	17S	31E					Eddy

Latitude N32.49.479'

Longitude W103.51.338

NATURE OF RELEASE

Type of Release-Oil	Volume of Release-38bbbls	Volume Recovered- 35bbbls
Source of Release- Oil tank	Date and Hour of Occurrence- 12/27/09	Date and Hour of Discovery 12/27/09
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher OCD	
By Whom? Rick Wright	Date and Hour 12/27/09 PM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Caused by a plugged water meter on a heater which then sent too much fluid to tank outrunning the equalizers.

Describe Area Affected and Cleanup Action Taken.*

Tetra Tech will sample the spill site area to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD/BLM for your approval prior to any significant remediation work.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 		OIL CONSERVATION DIVISION	
Printed Name: Chasity Jackson		Approved by District Supervisor:	
Title: Agent for COG	Approval Date:	Expiration Date:	
E-mail Address: cjackson@conchoresources.com	Conditions of Approval:		Attached ☐
Date: 1/7/10	Phone: 432-686-3087		

* Attach Additional Sheets If Necessary

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Oil Conservation Division
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Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company	COG Operating LLC	Contact	Pat Ellis
Address	550 W. Texas, Suite 1300 Midland, Texas 79701	Telephone No.	(432) 685-4332
Facility Name	Skelly 942	Facility Type	Tank Battery

Surface Owner	Federal	Mineral Owner		Lease No.	30-015-34645
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	22	17S	31E	1210	North	2195	East	Eddy

Latitude N 32°49.482 Longitude W 103°51.340

NATURE OF RELEASE

Type of Release Oil	Volume of Release	38 bbls	Volume Recovered	35 bbls
Source of Release	Date and Hour of Occurrence		Date and Hour of Discovery	
Production tank	Unknown	12/27/09	12/27/09	
Was Immediate Notice Given?	If YES, To Whom?			
☒ Yes ☐ No ☐ Not Required	Mike Bratcher OCD			
By Whom? Rick Wright	Date and Hour 12/27/09			
Was a Watercourse Reached?	If YES, Volume Impacting the Watercourse.			
☐ Yes ☒ No	N/A			

If a Watercourse was Impacted, Describe Fully.*

N/A

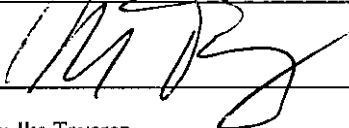
Describe Cause of Problem and Remedial Action Taken.*

Cause by a plugged water meter on a heater which then sent too much fluid to tank outrunning the equalizer.

Describe Area Affected and Cleanup Action Taken.*

The spill was contained inside the facility firewalls. The spill migrated into an open excavation (10' x 30') performed during a previous release, which was in progress. The area was assessed evaluate the spill. The impacted soils above the RRAL were removed and hauled to CRI for disposal. The excavations was been backfilled with clean soil. A closure report has been prepared and submitted to the NMOCD for review and approval.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 		<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Ike Tavarez		Approved by District Supervisor:	
Title: Project Manager		Approval Date:	Expiration Date:
E-mail Address: ike.tavarez@tetrattech.com		Conditions of Approval:	
Date: 6-2-10 Phone: (432) 682-4559		Attached ☐	

* Attach Additional Sheets If Necessary

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Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company	COG Operating LLC	Contact	Pat Ellis
Address	550 W. Texas, Suite 1300 Midland, Texas 79701	Telephone No.	(432) 685-4332
Facility Name	Skelly 942	Facility Type	Tank Battery
Surface Owner	Federal	Mineral Owner	
		Lease No.	30-015-34645

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	22	17S	31E	1210	North	2195	East	Eddy

Latitude N 32°49.482 Longitude W 103°51.340

NATURE OF RELEASE

Type of Release Oil	Volume of Release 170 bbls	Volume Recovered 160 bbls
Source of Release Production tank	Date and Hour of Occurrence Unknown 11/12/09 AM	Date and Hour of Discovery 11/12/09 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher OCD Terry Gregston BLM	
By Whom? Rick Wright	Date and Hour 11/12/09 am	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		
Describe Cause of Problem and Remedial Action Taken.* Safety gauge float malfunctioned causing the production oil tank to run over. The safety gauge has been repaired.		
Describe Area Affected and Cleanup Action Taken.* The spill was contained inside the facility firewalls. The spill area was assessed to evaluate the spill area. The impacted soils above the RRAL were removed and hauled to CRI for disposal. The excavation was backfilled with clean soil. A closure report has been prepared and submitted to the NMOCD for review and approval.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		

OIL CONSERVATION DIVISION

Signature:	Approved by District Supervisor:		
Printed Name: Ike Tavarez			
Title: Project Manager	Approval Date:	Expiration Date:	
E-mail Address: ike.tavarez@tetrattech.com	Conditions of Approval:		Attached ☐
Date:	Phone: (432) 682-4559		

* Attach Additional Sheets If Necessary

APPENDIX B

Water Well Data
Average Depth to Groundwater (ft)
COG - Skelly 942 Tank Battery
Eddy County, New Mexico

16 South			30 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

16 South			31 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

16 South			32 East		
6	5	4	3	65	2
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

17 South			30 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

17 South			31 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

17 South			32 East		
6	5	4	82	3	2
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

18 South			30 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

18 South			31 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

18 South			32 East		
6	5	4	65	3	2
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

- 88** New Mexico State Engineers Well Reports
- 105** USGS Well Reports
- 90** Geology and Groundwater Conditions in Southern Lea, County, NM
- 34** NMOCD - Groundwater Data
- 123** Field water level
- 362** New Mexico Water and Infrastructure Data System

APPENDIX C

Summary Report

Ike Tavaréz
Tetra Tech
1910 N. Big Spring Street
Midland, TX 79705

Report Date: December 1, 2009

Work Order: 9111903



Project Location: Eddy County, NM
Project Name: COG/Skelly 942
Project Number: 114-6400369

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
215203	AH-1 0-1' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215204	AH-1 1'-1.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215205	AH-1 2'-2.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215206	AH-1 3'-3.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215207	AH-2 0-1' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215208	AH-2 1'-1.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215209	AH-2 2'-2.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215210	AH-2 3'-3.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215211	AH-3 0-1' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215212	AH-3 1'-1.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215213	AH-3 2'-2.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215214	AH-4 0-1' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215215	AH-4 1'-1.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215216	AH-4 2'-2.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215217	AH-4 3'-3.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215218	AH-4 4'-4.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215219	AH-5 0-1' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215220	AH-5 1'-1.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215221	AH-5 2'-2.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215222	AH-5 3'-3.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215223	AH-6 0-1' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215224	AH-6 1'-1.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215225	AH-6 2'-2.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215226	AH-6 3'-3.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215227	AH-7 0-1' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215228	AH-7 1'-1.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215229	AH-7 2'-2.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215230	AH-7 3'-3.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215231	AH-7 4'-4.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215232	AH-8 0-1' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
215233	AH-8 1'-1.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215234	AH-8 2'-2.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215235	AH-8 3'-3.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215236	AH-2 4'-4.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215237	AH-3 3'-3.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18

Sample - Field Code	BTEX				TPH DRO - NEW	TPH GRO
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
215203 - AH-1 0-1' 6 in. BEB					1180	1830
215205 - AH-1 2'-2.5' 6 in. BEB	<0.0100	<0.0100	<0.0100	<0.0100		
215207 - AH-2 0-1' 6 in. BEB					1110	3180
215209 - AH-2 2'-2.5' 6 in. BEB	2.36	61.9	61.1	6.94		
215210 - AH-2 3'-3.5' 6 in. BEB	0.690	28.0	36.3	45.6		
215211 - AH-3 0-1' 6 in. BEB					1160	2980
215213 - AH-3 2'-2.5' 6 in. BEB	<0.0100	0.200	1.54	3.13		
215214 - AH-4 0-1' 6 in. BEB					558	1200
215216 - AH-4 2'-2.5' 6 in. BEB	<0.0100	<0.0100	<0.0100	<0.0100		
215219 - AH-5 0-1' 6 in. BEB					1770	2520
215221 - AH-5 2'-2.5' 6 in. BEB	<0.0100	<0.0100	<0.0100	<0.0100		
215223 - AH-6 0-1' 6 in. BEB					1100	3130
215225 - AH-6 2'-2.5' 6 in. BEB	<0.0100	<0.0100	<0.0100	<0.0100		
215227 - AH-7 0-1' 6 in. BEB					226	146
215232 - AH-8 0-1' 6 in. BEB					170	111

Sample: 215203 - AH-1 0-1' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		2340	mg/Kg	4.00

Sample: 215204 - AH-1 1'-1.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		784	mg/Kg	4.00

Sample: 215205 - AH-1 2'-2.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		837	mg/Kg	4.00

Sample: 215206 - AH-1 3'-3.5' 6 in. BEB

continued ...

sample 215206 continued ...

Param	Flag	Result	Units	RL
Param	Flag	Result	Units	RL
Chloride		1370	mg/Kg	4.00

Sample: 215207 - AH-2 0-1' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		2560	mg/Kg	4.00

Sample: 215208 - AH-2 1'-1.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 215209 - AH-2 2'-2.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 215210 - AH-2 3'-3.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 215211 - AH-3 0-1' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		3290	mg/Kg	4.00

Sample: 215212 - AH-3 1'-1.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 215213 - AH-3 2'-2.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 215214 - AH-4 0-1' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		1350	mg/Kg	4.00

Sample: 215215 - AH-4 1'-1.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		1790	mg/Kg	4.00

Sample: 215216 - AH-4 2'-2.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 215217 - AH-4 3'-3.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 215218 - AH-4 4'-4.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 215219 - AH-5 0-1' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		849	mg/Kg	4.00

Sample: 215220 - AH-5 1'-1.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 215221 - AH-5 2'-2.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 215222 - AH-5 3'-3.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 215223 - AH-6 0-1' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		1090	mg/Kg	4.00

Sample: 215224 - AH-6 1'-1.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 215225 - AH-6 2'-2.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 215226 - AH-6 3'-3.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 215227 - AH-7 0-1' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		883	mg/Kg	4.00

Sample: 215228 - AH-7 1'-1.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		2950	mg/Kg	4.00

Sample: 215229 - AH-7 2'-2.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		3010	mg/Kg	4.00

Sample: 215230 - AH-7 3'-3.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		482	mg/Kg	4.00

Sample: 215231 - AH-7 4'-4.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 215232 - AH-8 0-1' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		1110	mg/Kg	4.00

Sample: 215233 - AH-8 1'-1.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 215234 - AH-8 2'-2.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		361	mg/Kg	4.00

Sample: 215235 - AH-8 3'-3.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		422	mg/Kg	4.00

Sample: 215236 - AH-2 4'-4.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		224	mg/Kg	4.00

Sample: 215237 - AH-3 3'-3.5' 6 in. BEB

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

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NELAP Certifications

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LELAP-02003
Kansas E-10317

El Paso: T104704221-08-TX
LELAP-02002

Midland: T104704392-08-TX

Analytical and Quality Control Report

Ike Tavarez
Tetra Tech
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: December 1, 2009

Work Order: 9111903



Project Location: Eddy County, NM
Project Name: COG/Skelly 942
Project Number: 114-6400369

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
215203	AH-1 0-1' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215204	AH-1 1'-1.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215205	AH-1 2'-2.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215206	AH-1 3'-3.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215207	AH-2 0-1' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215208	AH-2 1'-1.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215209	AH-2 2'-2.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215210	AH-2 3'-3.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215211	AH-3 0-1' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215212	AH-3 1'-1.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
215213	AH-3 2'-2.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215214	AH-4 0-1' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215215	AH-4 1'-1.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215216	AH-4 2'-2.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215217	AH-4 3'-3.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215218	AH-4 4'-4.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215219	AH-5 0-1' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215220	AH-5 1'-1.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215221	AH-5 2'-2.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215222	AH-5 3'-3.5' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215223	AH-6 0-1' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215224	AH-6 1'-1.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215225	AH-6 2'-2.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215226	AH-6 3'-3.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215227	AH-7 0-1' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215228	AH-7 1'-1.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215229	AH-7 2'-2.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215230	AH-7 3'-3.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215231	AH-7 4'-4.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215232	AH-8 0-1' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215233	AH-8 1'-1.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215234	AH-8 2'-2.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215235	AH-8 3'-3.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215236	AH-2 4'-4.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18
215237	AH-3 3'-3.5' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 35 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project COG/Skelly 942 were received by TraceAnalysis, Inc. on 2009-11-18 and assigned to work order 9111903. Samples for work order 9111903 were received intact at a temperature of 4.0 deg. C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	56012	2009-11-23 at 13:00	65542	2009-11-23 at 17:16
BTEX	S 8021B	56089	2009-11-25 at 11:00	65629	2009-11-25 at 03:26
Chloride (Titration)	SM 4500-Cl B	55983	2009-11-23 at 10:15	65528	2009-11-23 at 15:46
Chloride (Titration)	SM 4500-Cl B	55984	2009-11-23 at 10:16	65529	2009-11-23 at 15:48
Chloride (Titration)	SM 4500-Cl B	55985	2009-11-23 at 10:16	65530	2009-11-23 at 15:48
Chloride (Titration)	SM 4500-Cl B	55986	2009-11-23 at 10:17	65531	2009-11-23 at 15:49
TPH DRO - NEW	Mod. 8015B	55929	2009-11-19 at 15:20	65453	2009-11-19 at 15:20
TPH GRO	S 8015B	55928	2009-11-19 at 11:00	65457	2009-11-20 at 00:23

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9111903 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 215203 - AH-1 0-1' 6 in. BEB

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-11-23	Analyzed By:	AR
QC Batch:	65528	Sample Preparation:	2009-11-23	Prepared By:	AR
Prep Batch:	55983				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2340	mg/Kg	100	4.00

Sample: 215203 - AH-1 0-1' 6 in. BEB

Laboratory:	Midland	Analytical Method:	Mod. 8015B	Prep Method:	N/A
Analysis:	TPH DRO - NEW	Date Analyzed:	2009-11-19	Analyzed By:	kg
QC Batch:	65453	Sample Preparation:	2009-11-19	Prepared By:	kg
Prep Batch:	55929				

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		1180	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	1	135	mg/Kg	1	100	135	70 - 130

Sample: 215203 - AH-1 0-1' 6 in. BEB

Laboratory:	Midland	Analytical Method:	S 8015B	Prep Method:	S 5035
Analysis:	TPH GRO	Date Analyzed:	2009-11-20	Analyzed By:	AG
QC Batch:	65457	Sample Preparation:	2009-11-19	Prepared By:	AG
Prep Batch:	55928				

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		1830	mg/Kg	50	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		54.5	mg/Kg	50	50.0	109	65.3 - 115
4-Bromofluorobenzene (4-BFB)		60.2	mg/Kg	50	50.0	120	61.7 - 121.1

¹ High surrogate recovery due to peak interference.

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 5 of 35
Eddy County, NM

Sample: 215204 - AH-1 1'-1.5' 6 in. BEB

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65528	Date Analyzed:	2009-11-23
Prep Batch:	55983	Sample Preparation:	2009-11-23
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		784	mg/Kg	50	4.00

Sample: 215205 - AH-1 2'-2.5' 6 in. BEB

Laboratory:	Midland		
Analysis:	BTEX	Analytical Method:	S 8021B
QC Batch:	65542	Date Analyzed:	2009-11-23
Prep Batch:	56012	Sample Preparation:	2009-11-23
		Prep Method:	S 5035
		Analyzed By:	tn
		Prepared By:	tn

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.19	mg/Kg	1	2.00	110	64.4 - 111.2
4-Bromofluorobenzene (4-BFB)		1.92	mg/Kg	1	2.00	96	43.1 - 128.4

Sample: 215205 - AH-1 2'-2.5' 6 in. BEB

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65528	Date Analyzed:	2009-11-23
Prep Batch:	55983	Sample Preparation:	2009-11-23
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		837	mg/Kg	50	4.00

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 6 of 35
Eddy County, NM

Sample: 215206 - AH-1 3'-3.5' 6 in. BEB

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65528	Date Analyzed:	2009-11-23
Prep Batch:	55983	Sample Preparation:	2009-11-23
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1370	mg/Kg	50	4.00

Sample: 215207 - AH-2 0-1' 6 in. BEB

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65528	Date Analyzed:	2009-11-23
Prep Batch:	55983	Sample Preparation:	2009-11-23
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2560	mg/Kg	100	4.00

Sample: 215207 - AH-2 0-1' 6 in. BEB

Laboratory:	Midland		
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B
QC Batch:	65453	Date Analyzed:	2009-11-19
Prep Batch:	55929	Sample Preparation:	2009-11-19
		Prep Method:	N/A
		Analyzed By:	kg
		Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		1110	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		127	mg/Kg	1	100	127	70 - 130

Sample: 215207 - AH-2 0-1' 6 in. BEB

Laboratory:	Midland		
Analysis:	TPH GRO	Analytical Method:	S 8015B
QC Batch:	65457	Date Analyzed:	2009-11-20
Prep Batch:	55928	Sample Preparation:	2009-11-19
		Prep Method:	S 5035
		Analyzed By:	AG
		Prepared By:	AG

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 7 of 35
Eddy County, NM

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		3180	mg/Kg	50	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	²	78.8	mg/Kg	50	50.0	158	65.3 - 115
4-Bromofluorobenzene (4-BFB)	³	80.9	mg/Kg	50	50.0	162	61.7 - 121.1

Sample: 215208 - AH-2 1'-1.5' 6 in. BEB

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 65528 Date Analyzed: 2009-11-23 Analyzed By: AR
Prep Batch: 55983 Sample Preparation: 2009-11-23 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 215209 - AH-2 2'-2.5' 6 in. BEB

Laboratory: Midland
Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 65542 Date Analyzed: 2009-11-23 Analyzed By: tn
Prep Batch: 56012 Sample Preparation: 2009-11-23 Prepared By: tn

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		2.36	mg/Kg	50	0.0100
Toluene		61.9	mg/Kg	50	0.0100
Ethylbenzene		61.1	mg/Kg	50	0.0100
Xylene		6.94	mg/Kg	50	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		53.4	mg/Kg	50	50.0	107	64.4 - 111.2
4-Bromofluorobenzene (4-BFB)		64.1	mg/Kg	50	50.0	128	43.1 - 128.4

Sample: 215209 - AH-2 2'-2.5' 6 in. BEB

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 65528 Date Analyzed: 2009-11-23 Analyzed By: AR
Prep Batch: 55983 Sample Preparation: 2009-11-23 Prepared By: AR

²High surrogate recovery due to peak interference.

³High surrogate recovery due to peak interference.

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 8 of 35
Eddy County, NM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 215210 - AH-2 3'-3.5' 6 in. BEB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		0.690	mg/Kg	50	0.0100
Toluene		28.0	mg/Kg	50	0.0100
Ethylbenzene		36.3	mg/Kg	50	0.0100
Xylene		45.6	mg/Kg	50	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		54.4	mg/Kg	50	50.0	109	64.4 - 111.2
4-Bromofluorobenzene (4-BFB)		58.5	mg/Kg	50	50.0	117	43.1 - 128.4

Sample: 215210 - AH-2 3'-3.5' 6 in. BEB

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65528	Date Analyzed:	2009-11-23
Prep Batch:	55983	Sample Preparation:	2009-11-23
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 215211 - AH-3 0-1' 6 in. BEB

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65528	Date Analyzed:	2009-11-23
Prep Batch:	55983	Sample Preparation:	2009-11-23
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3290	mg/Kg	100	4.00

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 9 of 35
Eddy County, NM

Sample: 215211 - AH-3 0-1' 6 in. BEB

Laboratory:	Midland		
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B
QC Batch:	65453	Date Analyzed:	2009-11-19
Prep Batch:	55929	Sample Preparation:	2009-11-19
		Prep Method:	N/A
		Analyzed By:	kg
		Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		1160	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	⁴	131	mg/Kg	1	100	131	70 - 130

Sample: 215211 - AH-3 0-1' 6 in. BEB

Laboratory:	Midland		
Analysis:	TPH GRO	Analytical Method:	S 8015B
QC Batch:	65457	Date Analyzed:	2009-11-20
Prep Batch:	55928	Sample Preparation:	2009-11-19
		Prep Method:	S 5035
		Analyzed By:	AG
		Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		2980	mg/Kg	50	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		52.7	mg/Kg	50	50.0	105	65.3 - 115
4-Bromofluorobenzene (4-BFB)	⁵	69.7	mg/Kg	50	50.0	139	61.7 - 121.1

Sample: 215212 - AH-3 1'-1.5' 6 in. BEB

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65528	Date Analyzed:	2009-11-23
Prep Batch:	55983	Sample Preparation:	2009-11-23
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

⁴High surrogate recovery due to peak interference.

⁵High surrogate recovery due to peak interference.

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 10 of 35
Eddy County, NM

Sample: 215213 - AH-3 2'-2.5' 6 in. BEB

Laboratory: Midland
Analysis: BTEX
QC Batch: 65542
Prep Batch: 56012

Analytical Method: S 8021B
Date Analyzed: 2009-11-23
Sample Preparation: 2009-11-23

Prep Method: S 5035
Analyzed By: tn
Prepared By: tn

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		0.200	mg/Kg	1	0.0100
Ethylbenzene		1.54	mg/Kg	1	0.0100
Xylene		3.13	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.20	mg/Kg	1	2.00	110	64.4 - 111.2
4-Bromofluorobenzene (4-BFB)	6	3.25	mg/Kg	1	2.00	162	43.1 - 128.4

Sample: 215213 - AH-3 2'-2.5' 6 in. BEB

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 65529
Prep Batch: 55984

Analytical Method: SM 4500-Cl B
Date Analyzed: 2009-11-23
Sample Preparation: 2009-11-23

Prep Method: N/A
Analyzed By: AR
Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 215214 - AH-4 0-1' 6 in. BEB

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 65529
Prep Batch: 55984

Analytical Method: SM 4500-Cl B
Date Analyzed: 2009-11-23
Sample Preparation: 2009-11-23

Prep Method: N/A
Analyzed By: AR
Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1350	mg/Kg	50	4.00

⁶High surrogate recovery due to peak interference.

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 11 of 35
Eddy County, NM

Sample: 215214 - AH-4 0-1' 6 in. BEB

Laboratory:	Midland		
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B
QC Batch:	65453	Date Analyzed:	2009-11-19
Prep Batch:	55929	Sample Preparation:	2009-11-19
		Prep Method:	N/A
		Analyzed By:	kg
		Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		558	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		116	mg/Kg	1	100	116	70 - 130

Sample: 215214 - AH-4 0-1' 6 in. BEB

Laboratory:	Midland		
Analysis:	TPH GRO	Analytical Method:	S 8015B
QC Batch:	65457	Date Analyzed:	2009-11-20
Prep Batch:	55928	Sample Preparation:	2009-11-19
		Prep Method:	S 5035
		Analyzed By:	AG
		Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		1200	mg/Kg	50	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		54.1	mg/Kg	50	50.0	108	65.3 - 115
4-Bromofluorobenzene (4-BFB)		58.1	mg/Kg	50	50.0	116	61.7 - 121.1

Sample: 215215 - AH-4 1'-1.5' 6 in. BEB

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65529	Date Analyzed:	2009-11-23
Prep Batch:	55984	Sample Preparation:	2009-11-23
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1790	mg/Kg	50	4.00

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 12 of 35
Eddy County, NM

Sample: 215216 - AH-4 2'-2.5' 6 in. BEB

Laboratory: Midland
Analysis: BTEX
QC Batch: 65542
Prep Batch: 56012

Analytical Method: S 8021B
Date Analyzed: 2009-11-23
Sample Preparation: 2009-11-23

Prep Method: S 5035
Analyzed By: tn
Prepared By: tn

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.12	mg/Kg	1	2.00	106	64.4 - 111.2
4-Bromofluorobenzene (4-BFB)		1.88	mg/Kg	1	2.00	94	43.1 - 128.4

Sample: 215216 - AH-4 2'-2.5' 6 in. BEB

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 65529
Prep Batch: 55984

Analytical Method: SM 4500-Cl B
Date Analyzed: 2009-11-23
Sample Preparation: 2009-11-23

Prep Method: N/A
Analyzed By: AR
Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 215217 - AH-4 3'-3.5' 6 in. BEB

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 65529
Prep Batch: 55984

Analytical Method: SM 4500-Cl B
Date Analyzed: 2009-11-23
Sample Preparation: 2009-11-23

Prep Method: N/A
Analyzed By: AR
Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 13 of 35
Eddy County, NM

Sample: 215218 - AH-4 4'-4.5' 6 in. BEB

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-11-23	Analyzed By:	AR
QC Batch:	65529	Sample Preparation:	2009-11-23	Prepared By:	AR
Prep Batch:	55984				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 215219 - AH-5 0-1' 6 in. BEB

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-11-23	Analyzed By:	AR
QC Batch:	65529	Sample Preparation:	2009-11-23	Prepared By:	AR
Prep Batch:	55984				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		849	mg/Kg	50	4.00

Sample: 215219 - AH-5 0-1' 6 in. BEB

Laboratory:	Midland	Analytical Method:	Mod. 8015B	Prep Method:	N/A
Analysis:	TPH DRO - NEW	Date Analyzed:	2009-11-19	Analyzed By:	kg
QC Batch:	65453	Sample Preparation:	2009-11-19	Prepared By:	kg
Prep Batch:	55929				

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		1770	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	7	151	mg/Kg	1	100	151	70 - 130

Sample: 215219 - AH-5 0-1' 6 in. BEB

Laboratory:	Midland	Analytical Method:	S 8015B	Prep Method:	S 5035
Analysis:	TPH GRO	Date Analyzed:	2009-11-20	Analyzed By:	AG
QC Batch:	65457	Sample Preparation:	2009-11-19	Prepared By:	AG
Prep Batch:	55928				

⁷High surrogate recovery due to peak interference.

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 14 of 35
Eddy County, NM

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		2520	mg/Kg	50	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		54.1	mg/Kg	50	50.0	108	65.3 - 115
4-Bromofluorobenzene (4-BFB)	8	69.5	mg/Kg	50	50.0	139	61.7 - 121.1

Sample: 215220 - AH-5 1'-1.5' 6 in. BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	65529	Date Analyzed:	2009-11-23	Analyzed By:	AR
Prep Batch:	55984	Sample Preparation:	2009-11-23	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 215221 - AH-5 2'-2.5' 6 in. BEB

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	65542	Date Analyzed:	2009-11-23	Analyzed By:	tn
Prep Batch:	56012	Sample Preparation:	2009-11-23	Prepared By:	tn

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.16	mg/Kg	1	2.00	108	64.4 - 111.2
4-Bromofluorobenzene (4-BFB)		1.92	mg/Kg	1	2.00	96	43.1 - 128.4

Sample: 215221 - AH-5 2'-2.5' 6 in. BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	65529	Date Analyzed:	2009-11-23	Analyzed By:	AR
Prep Batch:	55984	Sample Preparation:	2009-11-23	Prepared By:	AR

⁸High surrogate recovery due to peak interference.

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 15 of 35
Eddy County, NM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 215222 - AH-5 3'-3.5' 6 in. BEB

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 65529 Date Analyzed: 2009-11-23 Analyzed By: AR
Prep Batch: 55984 Sample Preparation: 2009-11-23 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 215223 - AH-6 0-1' 6 in. BEB

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 65530 Date Analyzed: 2009-11-23 Analyzed By: AR
Prep Batch: 55985 Sample Preparation: 2009-11-23 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1090	mg/Kg	50	4.00

Sample: 215223 - AH-6 0-1' 6 in. BEB

Laboratory: Midland
Analysis: TPH DRO - NEW Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 65453 Date Analyzed: 2009-11-19 Analyzed By: kg
Prep Batch: 55929 Sample Preparation: 2009-11-19 Prepared By: kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		1100	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		128	mg/Kg	1	100	128	70 - 130

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 16 of 35
Eddy County, NM

Sample: 215223 - AH-6 0-1' 6 in. BEB

Laboratory:	Midland		
Analysis:	TPH GRO	Analytical Method:	S 8015B
QC Batch:	65457	Date Analyzed:	2009-11-20
Prep Batch:	55928	Sample Preparation:	2009-11-19
		Prep Method:	S 5035
		Analyzed By:	AG
		Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		3130	mg/Kg	50	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		53.8	mg/Kg	50	50.0	108	65.3 - 115
4-Bromofluorobenzene (4-BFB)	⁹	76.6	mg/Kg	50	50.0	153	61.7 - 121.1

Sample: 215224 - AH-6 1'-1.5' 6 in. BEB

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65530	Date Analyzed:	2009-11-23
Prep Batch:	55985	Sample Preparation:	2009-11-23
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 215225 - AH-6 2'-2.5' 6 in. BEB

Laboratory:	Midland		
Analysis:	BTEX	Analytical Method:	S 8021B
QC Batch:	65542	Date Analyzed:	2009-11-23
Prep Batch:	56012	Sample Preparation:	2009-11-23
		Prep Method:	S 5035
		Analyzed By:	tn
		Prepared By:	tn

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.12	mg/Kg	1	2.00	106	64.4 - 111.2

continued ...

⁹High surrogate recovery due to peak interference.

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 17 of 35
Eddy County, NM

sample continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)		1.88	mg/Kg	1	2.00	94	43.1 - 128.4

Sample: 215225 - AH-6 2'-2.5' 6 in. BEB

Laboratory: Midland	Analytical Method: SM 4500-Cl B	Prep Method: N/A
Analysis: Chloride (Titration)	Date Analyzed: 2009-11-23	Analyzed By: AR
QC Batch: 65530	Sample Preparation: 2009-11-23	Prepared By: AR
Prep Batch: 55985		

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 215226 - AH-6 3'-3.5' 6 in. BEB

Laboratory: Midland	Analytical Method: SM 4500-Cl B	Prep Method: N/A
Analysis: Chloride (Titration)	Date Analyzed: 2009-11-23	Analyzed By: AR
QC Batch: 65530	Sample Preparation: 2009-11-23	Prepared By: AR
Prep Batch: 55985		

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 215227 - AH-7 0-1' 6 in. BEB

Laboratory: Midland	Analytical Method: SM 4500-Cl B	Prep Method: N/A
Analysis: Chloride (Titration)	Date Analyzed: 2009-11-23	Analyzed By: AR
QC Batch: 65530	Sample Preparation: 2009-11-23	Prepared By: AR
Prep Batch: 55985		

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		883	mg/Kg	50	4.00

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 18 of 35
Eddy County, NM

Sample: 215227 - AH-7 0-1' 6 in. BEB

Laboratory:	Midland		
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B
QC Batch:	65453	Date Analyzed:	2009-11-19
Prep Batch:	55929	Sample Preparation:	2009-11-19
		Prep Method:	N/A
		Analyzed By:	kg
		Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		226	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		108	mg/Kg	1	100	108	70 - 130

Sample: 215227 - AH-7 0-1' 6 in. BEB

Laboratory:	Midland		
Analysis:	TPH GRO	Analytical Method:	S 8015B
QC Batch:	65457	Date Analyzed:	2009-11-20
Prep Batch:	55928	Sample Preparation:	2009-11-19
		Prep Method:	S 5035
		Analyzed By:	AG
		Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		146	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.41	mg/Kg	5	5.00	108	65.3 - 115
4-Bromofluorobenzene (4-BFB)	¹⁰	6.16	mg/Kg	5	5.00	123	61.7 - 121.1

Sample: 215228 - AH-7 1'-1.5' 6 in. BEB

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65530	Date Analyzed:	2009-11-23
Prep Batch:	55985	Sample Preparation:	2009-11-23
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2950	mg/Kg	100	4.00

¹⁰High surrogate recovery due to peak interference.

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 19 of 35
Eddy County, NM

Sample: 215229 - AH-7 2'-2.5' 6 in. BEB

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65530	Date Analyzed:	2009-11-23
Prep Batch:	55985	Sample Preparation:	2009-11-23
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3010	mg/Kg	100	4.00

Sample: 215230 - AH-7 3'-3.5' 6 in. BEB

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65530	Date Analyzed:	2009-11-23
Prep Batch:	55985	Sample Preparation:	2009-11-23
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		482	mg/Kg	50	4.00

Sample: 215231 - AH-7 4'-4.5' 6 in. BEB

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65530	Date Analyzed:	2009-11-23
Prep Batch:	55985	Sample Preparation:	2009-11-23
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 215232 - AH-8 0-1' 6 in. BEB

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65530	Date Analyzed:	2009-11-23
Prep Batch:	55985	Sample Preparation:	2009-11-23
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1110	mg/Kg	50	4.00

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 20 of 35
Eddy County, NM

Sample: 215232 - AH-8 0-1' 6 in. BEB

Laboratory:	Midland	Analytical Method:	Mod. 8015B	Prep Method:	N/A
Analysis:	TPH DRO - NEW	Date Analyzed:	2009-11-19	Analyzed By:	kg
QC Batch:	65453	Sample Preparation:	2009-11-19	Prepared By:	kg
Prep Batch:	55929				

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		170	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		107	mg/Kg	1	100	107	70 - 130

Sample: 215232 - AH-8 0-1' 6 in. BEB

Laboratory:	Midland	Analytical Method:	S 8015B	Prep Method:	S 5035
Analysis:	TPH GRO	Date Analyzed:	2009-11-20	Analyzed By:	AG
QC Batch:	65457	Sample Preparation:	2009-11-19	Prepared By:	AG
Prep Batch:	55928				

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		111	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.37	mg/Kg	5	5.00	107	65.3 - 115
4-Bromofluorobenzene (4-BFB)		5.32	mg/Kg	5	5.00	106	61.7 - 121.1

Sample: 215233 - AH-8 1'-1.5' 6 in. BEB

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-11-23	Analyzed By:	AR
QC Batch:	65531	Sample Preparation:	2009-11-23	Prepared By:	AR
Prep Batch:	55986				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 21 of 35
Eddy County, NM

Sample: 215234 - AH-8 2'-2.5' 6 in. BEB

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65531	Date Analyzed:	2009-11-23
Prep Batch:	55986	Sample Preparation:	2009-11-23
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		361	mg/Kg	50	4.00

Sample: 215235 - AH-8 3'-3.5' 6 in. BEB

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65531	Date Analyzed:	2009-11-23
Prep Batch:	55986	Sample Preparation:	2009-11-23
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		422	mg/Kg	50	4.00

Sample: 215236 - AH-2 4'-4.5' 6 in. BEB

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65531	Date Analyzed:	2009-11-23
Prep Batch:	55986	Sample Preparation:	2009-11-23
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		224	mg/Kg	50	4.00

Sample: 215237 - AH-3 3'-3.5' 6 in. BEB

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65531	Date Analyzed:	2009-11-23
Prep Batch:	55986	Sample Preparation:	2009-11-23
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 22 of 35
Eddy County, NM

Method Blank (1) QC Batch: 65453

QC Batch: 65453
Prep Batch: 55929

Date Analyzed: 2009-11-19
QC Preparation: 2009-11-19

Analyzed By: kg
Prepared By: kg

Parameter	Flag	MDL Result	Units	RL
DRO		<5.86	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		95.2	mg/Kg	1	100	95	70 - 130

Method Blank (1) QC Batch: 65457

QC Batch: 65457
Prep Batch: 55928

Date Analyzed: 2009-11-20
QC Preparation: 2009-11-19

Analyzed By: AG
Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
GRO		<0.396	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.21	mg/Kg	1	2.00	110	66.2 - 125
4-Bromofluorobenzene (4-BFB)		1.82	mg/Kg	1	2.00	91	62 - 120.5

Method Blank (1) QC Batch: 65528

QC Batch: 65528
Prep Batch: 55983

Date Analyzed: 2009-11-23
QC Preparation: 2009-11-23

Analyzed By: AR
Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 65529

QC Batch: 65529
Prep Batch: 55984

Date Analyzed: 2009-11-23
QC Preparation: 2009-11-23

Analyzed By: AR
Prepared By: AR

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 23 of 35
Eddy County, NM

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 65530

QC Batch: 65530 Date Analyzed: 2009-11-23 Analyzed By: AR
Prep Batch: 55985 QC Preparation: 2009-11-23 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 65531

QC Batch: 65531 Date Analyzed: 2009-11-23 Analyzed By: AR
Prep Batch: 55986 QC Preparation: 2009-11-23 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 65542

QC Batch: 65542 Date Analyzed: 2009-11-23 Analyzed By: tn
Prep Batch: 56012 QC Preparation: 2009-11-23 Prepared By: tn

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00410	mg/Kg	0.01
Toluene		<0.00310	mg/Kg	0.01
Ethylbenzene		<0.00240	mg/Kg	0.01
Xylene		<0.00650	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.14	mg/Kg	1	2.00	107	64.9 - 122.7
4-Bromofluorobenzene (4-BFB)		1.80	mg/Kg	1	2.00	90	43.9 - 121.9

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 24 of 35
Eddy County, NM

Method Blank (1) QC Batch: 65629

QC Batch: 65629
Prep Batch:

Date Analyzed:
QC Preparation:

Analyzed By:
Prepared By:

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00410	mg/Kg	0.01
Toluene		<0.00310	mg/Kg	0.01
Ethylbenzene		<0.00240	mg/Kg	0.01
Xylene		<0.00650	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.12	mg/Kg	1	2.00	106	64.9 - 122.7
4-Bromofluorobenzene (4-BFB)		1.80	mg/Kg	1	2.00	90	43.9 - 121.9

Laboratory Control Spike (LCS-1)

QC Batch: 65453
Prep Batch: 55929

Date Analyzed: 2009-11-19
QC Preparation: 2009-11-19

Analyzed By: kg
Prepared By: kg

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	203	mg/Kg	1	250	<5.86	81	57.4 - 133.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	203	mg/Kg	1	250	<5.86	81	57.4 - 133.4	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	108	107	mg/Kg	1	100	108	107	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 65457
Prep Batch: 55928

Date Analyzed: 2009-11-20
QC Preparation: 2009-11-19

Analyzed By: AG
Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	14.5	mg/Kg	1	20.0	<0.396	72	52.5 - 114.3

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 25 of 35
Eddy County, NM

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	14.4	mg/Kg	1	20.0	<0.396	72	52.5 - 114.3	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.17	2.16	mg/Kg	1	2.00	108	108	66.2 - 128.7
4-Bromofluorobenzene (4-BFB)	1.87	1.84	mg/Kg	1	2.00	94	92	64.1 - 127.4

Laboratory Control Spike (LCS-1)

QC Batch: 65528
Prep Batch: 55983

Date Analyzed: 2009-11-23
QC Preparation: 2009-11-23

Analyzed By: AR
Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	101	mg/Kg	1	100	<2.18	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	102	mg/Kg	1	100	<2.18	102	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 65529
Prep Batch: 55984

Date Analyzed: 2009-11-23
QC Preparation: 2009-11-23

Analyzed By: AR
Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	99.6	mg/Kg	1	100	<2.18	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	103	mg/Kg	1	100	<2.18	103	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 26 of 35
Eddy County, NM

Laboratory Control Spike (LCS-1)

QC Batch: 65530
Prep Batch: 55985

Date Analyzed: 2009-11-23
QC Preparation: 2009-11-23

Analyzed By: AR
Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.8	mg/Kg	1	100	<2.18	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	101	mg/Kg	1	100	<2.18	101	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 65531
Prep Batch: 55986

Date Analyzed: 2009-11-23
QC Preparation: 2009-11-23

Analyzed By: AR
Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	99.7	mg/Kg	1	100	<2.18	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	100	mg/Kg	1	100	<2.18	100	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 65542
Prep Batch: 56012

Date Analyzed: 2009-11-23
QC Preparation: 2009-11-23

Analyzed By: tn
Prepared By: tn

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.97	mg/Kg	1	2.00	<0.00410	98	75.4 - 115.7
Toluene	1.96	mg/Kg	1	2.00	<0.00310	98	78.4 - 113.6
Ethylbenzene	1.93	mg/Kg	1	2.00	<0.00240	96	76 - 114.2
Xylene	5.76	mg/Kg	1	6.00	<0.00650	96	76.9 - 113.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 27 of 35
Eddy County, NM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	2.01	mg/Kg	1	2.00	<0.00410	100	75.4 - 115.7	2	20
Toluene	1.99	mg/Kg	1	2.00	<0.00310	100	78.4 - 113.6	2	20
Ethylbenzene	1.97	mg/Kg	1	2.00	<0.00240	98	76 - 114.2	2	20
Xylene	5.90	mg/Kg	1	6.00	<0.00650	98	76.9 - 113.6	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.08	2.10	mg/Kg	1	2.00	104	105	65 - 122.9
4-Bromofluorobenzene (4-BFB)	1.88	1.88	mg/Kg	1	2.00	94	94	43.8 - 124.9

Laboratory Control Spike (LCS-1)

QC Batch: 65629
Prep Batch:

Date Analyzed:
QC Preparation:

Analyzed By:
Prepared By:

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.00	mg/Kg	1	2.00	<0.00410	100	75.4 - 115.7
Toluene	1.99	mg/Kg	1	2.00	<0.00310	100	78.4 - 113.6
Ethylbenzene	1.95	mg/Kg	1	2.00	<0.00240	98	76 - 114.2
Xylene	5.82	mg/Kg	1	6.00	<0.00650	97	76.9 - 113.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.95	mg/Kg	1	2.00	<0.00410	98	75.4 - 115.7	2	20
Toluene	1.94	mg/Kg	1	2.00	<0.00310	97	78.4 - 113.6	2	20
Ethylbenzene	1.91	mg/Kg	1	2.00	<0.00240	96	76 - 114.2	2	20
Xylene	5.70	mg/Kg	1	6.00	<0.00650	95	76.9 - 113.6	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.13	2.11	mg/Kg	1	2.00	106	106	65 - 122.9
4-Bromofluorobenzene (4-BFB)	1.91	1.88	mg/Kg	1	2.00	96	94	43.8 - 124.9

Matrix Spike (MS-1) Spiked Sample: 215283

QC Batch: 65453
Prep Batch: 55929

Date Analyzed: 2009-11-19
QC Preparation: 2009-11-19

Analyzed By: kg
Prepared By: kg

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 28 of 35
Eddy County, NM

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	157	mg/Kg	1	250	<5.86	63	35.2 - 167.1

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	162	mg/Kg	1	250	<5.86	65	35.2 - 167.1	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	85.8	91.6	mg/Kg	1	100	86	92	70 - 130

Matrix Spike (MS-1) Spiked Sample: 214963

QC Batch: 65457
Prep Batch: 55928

Date Analyzed: 2009-11-20
QC Preparation: 2009-11-19

Analyzed By: AG
Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	13.9	mg/Kg	1	20.0	<0.396	70	10 - 198.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	15.0	mg/Kg	1	20.0	<0.396	75	10 - 198.3	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.04	2.12	mg/Kg	1	2	102	106	65.5 - 123
4-Bromofluorobenzene (4-BFB)	1.91	1.93	mg/Kg	1	2	96	96	58.6 - 140

Matrix Spike (MS-1) Spiked Sample: 215212

QC Batch: 65528
Prep Batch: 55983

Date Analyzed: 2009-11-23
QC Preparation: 2009-11-23

Analyzed By: AR
Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	9730	mg/Kg	100	10000	<218	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 29 of 35
Eddy County, NM

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	10100	mg/Kg	100	10000	<218	101	85 - 115	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 215222

QC Batch: 65529
Prep Batch: 55984

Date Analyzed: 2009-11-23
QC Preparation: 2009-11-23

Analyzed By: AR
Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	10500	mg/Kg	100	10000	<218	105	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	10600	mg/Kg	100	10000	<218	106	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 215232

QC Batch: 65530
Prep Batch: 55985

Date Analyzed: 2009-11-23
QC Preparation: 2009-11-23

Analyzed By: AR
Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	11500	mg/Kg	100	10000	1110	104	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	11700	mg/Kg	100	10000	1110	106	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 215496

QC Batch: 65531
Prep Batch: 55986

Date Analyzed: 2009-11-23
QC Preparation: 2009-11-23

Analyzed By: AR
Prepared By: AR

continued ...

matrix spikes continued ...

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	10900	mg/Kg	100	10000	813	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	11200	mg/Kg	100	10000	813	104	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 215283

QC Batch: 65542
Prep Batch: 56012

Date Analyzed: 2009-11-23
QC Preparation: 2009-11-23

Analyzed By: tn
Prepared By: tn

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.20	mg/Kg	1	2.00	<0.00410	110	57.7 - 140.7
Toluene	2.22	mg/Kg	1	2.00	<0.00310	111	53.4 - 146.6
Ethylbenzene	2.26	mg/Kg	1	2.00	<0.00240	113	62.1 - 141.6
Xylene	6.77	mg/Kg	1	6.00	<0.00650	113	61.2 - 142.7

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	¹¹ 1.74	mg/Kg	1	2.00	<0.00410	87	57.7 - 140.7	23	20
Toluene	¹² 1.77	mg/Kg	1	2.00	<0.00310	88	53.4 - 146.6	23	20
Ethylbenzene	¹³ 1.81	mg/Kg	1	2.00	<0.00240	90	62.1 - 141.6	22	20
Xylene	¹⁴ 5.43	mg/Kg	1	6.00	<0.00650	90	61.2 - 142.7	22	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.11	2.09	mg/Kg	1	2	106	104	62.7 - 119.6
4-Bromofluorobenzene (4-BFB)	1.89	1.89	mg/Kg	1	2	94	94	49.6 - 136.7

¹¹MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

¹²MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

¹³MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

¹⁴MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 31 of 35
Eddy County, NM

Matrix Spike (MS-1) Spiked Sample: 215596

QC Batch: 65629
Prep Batch:

Date Analyzed:
QC Preparation:

Analyzed By:
Prepared By:

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	¹⁵	3.04	mg/Kg	1	2.00	<0.00410	152	57.7 - 140.7
Toluene	¹⁶	3.12	mg/Kg	1	2.00	<0.00310	156	53.4 - 146.6
Ethylbenzene	¹⁷	3.21	mg/Kg	1	2.00	<0.00240	160	62.1 - 141.6
Xylene	¹⁸	9.65	mg/Kg	1	6.00	<0.00650	161	61.2 - 142.7

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		2.51	mg/Kg	1	2.00	<0.00410	126	57.7 - 140.7	19	20
Toluene		2.56	mg/Kg	1	2.00	<0.00310	128	53.4 - 146.6	20	20
Ethylbenzene		2.65	mg/Kg	1	2.00	<0.00240	132	62.1 - 141.6	19	20
Xylene		7.92	mg/Kg	1	6.00	<0.00650	132	61.2 - 142.7	20	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.08	2.00	mg/Kg	1	2	104	100	62.7 - 119.6
4-Bromofluorobenzene (4-BFB)	1.94	1.82	mg/Kg	1	2	97	91	49.6 - 136.7

Standard (CCV-1)

QC Batch: 65453

Date Analyzed: 2009-11-19

Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	207	83	80 - 120	2009-11-19

Standard (CCV-2)

QC Batch: 65453

Date Analyzed: 2009-11-19

Analyzed By: kg

¹⁵Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

¹⁶Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

¹⁷Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

¹⁸Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 32 of 35
Eddy County, NM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	206	82	80 - 120	2009-11-19

Standard (CCV-3)

QC Batch: 65453 Date Analyzed: 2009-11-19 Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	214	86	80 - 120	2009-11-19

Standard (CCV-2)

QC Batch: 65457 Date Analyzed: 2009-11-20 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.921	92	80 - 120	2009-11-20

Standard (CCV-3)

QC Batch: 65457 Date Analyzed: 2009-11-20 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.987	99	80 - 120	2009-11-20

Standard (ICV-1)

QC Batch: 65528 Date Analyzed: 2009-11-23 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	106	106	85 - 115	2009-11-23

Standard (CCV-1)

QC Batch: 65528 Date Analyzed: 2009-11-23 Analyzed By: AR

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 33 of 35
Eddy County, NM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs' Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	94.2	94	85 - 115	2009-11-23

Standard (ICV-1)

QC Batch: 65529

Date Analyzed: 2009-11-23

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	96.2	96	85 - 115	2009-11-23

Standard (CCV-1)

QC Batch: 65529

Date Analyzed: 2009-11-23

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	104	104	85 - 115	2009-11-23

Standard (ICV-1)

QC Batch: 65530

Date Analyzed: 2009-11-23

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.1	98	85 - 115	2009-11-23

Standard (CCV-1)

QC Batch: 65530

Date Analyzed: 2009-11-23

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	102	102	85 - 115	2009-11-23

Standard (ICV-1)

QC Batch: 65531

Date Analyzed: 2009-11-23

Analyzed By: AR

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 34 of 35
Eddy County, NM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	102	102	85 - 115	2009-11-23

Standard (CCV-1)

QC Batch: 65531

Date Analyzed: 2009-11-23

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	97.9	98	85 - 115	2009-11-23

Standard (CCV-1)

QC Batch: 65542

Date Analyzed: 2009-11-23

Analyzed By: tn

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0984	98	80 - 120	2009-11-23
Toluene		mg/Kg	0.100	0.0972	97	80 - 120	2009-11-23
Ethylbenzene		mg/Kg	0.100	0.0968	97	80 - 120	2009-11-23
Xylene		mg/Kg	0.300	0.290	97	80 - 120	2009-11-23

Standard (CCV-2)

QC Batch: 65542

Date Analyzed: 2009-11-23

Analyzed By: tn

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0990	99	80 - 120	2009-11-23
Toluene		mg/Kg	0.100	0.0978	98	80 - 120	2009-11-23
Ethylbenzene		mg/Kg	0.100	0.0958	96	80 - 120	2009-11-23
Xylene		mg/Kg	0.300	0.287	96	80 - 120	2009-11-23

Standard (CCV-2)

QC Batch: 65629

Date Analyzed:

Analyzed By:

Report Date: December 1, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 35 of 35
Eddy County, NM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0979	98	80 - 120	2009-11-25
Toluene		mg/Kg	0.100	0.0973	97	80 - 120	2009-11-25
Ethylbenzene		mg/Kg	0.100	0.0957	96	80 - 120	2009-11-25
Xylene		mg/Kg	0.300	0.285	95	80 - 120	2009-11-25

Standard (CCV-3)

QC Batch: 65629

Date Analyzed:

Analyzed By:

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.104	104	80 - 120	2009-11-25
Toluene		mg/Kg	0.100	0.103	103	80 - 120	2009-11-25
Ethylbenzene		mg/Kg	0.100	0.101	101	80 - 120	2009-11-25
Xylene		mg/Kg	0.300	0.300	100	80 - 120	2009-11-25

Order # 911903

Analysis Request of Chain of Custody Record



TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME: C126		PROJECT NAME: C126 / 54614 942		SITE MANAGER: F. L. Tovar		PRESERVATIVE METHOD		NUMBER OF CONTAINERS		FILTERED (Y/N)		HCL		HNO3		ICE		NONE	
LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION													
213	4/17		S		X	21-2.5'	6" BEB												
214						0-1'	6" BEB												
215						1-1.5'	6" BEB												
216						2-2.5'	6" BEB												
217						3-3.5'	6" BEB												
218						4-4.5'	6" BEB												
219						0-1'	6" BEB												
220						1-1.5'	6" BEB												
221						2-2.5'	6" BEB												
222						3-3.5'	6" BEB												

RELINQUISHED BY: (Signature)	Date: 4/18/03	Time: 12:02	RECEIVED BY: (Signature)	Date: 4/18/03	Time: 12:02
RELINQUISHED BY: (Signature)	Date: 4/18/03	Time: 12:02	RECEIVED BY: (Signature)	Date: 4/18/03	Time: 12:02
RELINQUISHED BY: (Signature)	Date: 4/18/03	Time: 12:02	RECEIVED BY: (Signature)	Date: 4/18/03	Time: 12:02
RECEIVING LABORATORY: Tetra Tech	STATE: TX	ZIP: 79705	ADDRESS: Midland	PHONE: (432) 682-4559	DATE: 4/18/03

ANALYSIS REQUEST (Circle or Specify Method No.)		DATE: 4/18/03		TIME: 12:02	
TCLP Metals Ag As Ba Cd Cr Pb Hg Se		TCLP Semi Volatiles		TCLP Volatiles	
GC/MS Vol. 8240/8260/624		GC/MS Semi. Vol. 8270/625		PCB's 8080/808	
Pest. 808/608		Chloride		Gamma Spec.	
Alpha Beta (Aln)		PLM (Asbestos)		Major Anions/Cations, pH, TDS	
PAH 8270		RCHRA Metals Ag As Ba Cd Cr Pb Hg Se		TCLP Metals Ag As Ba Cd Cr Pb Hg Se	
BTX 8021B		TXH 8015 MOD (Ext. to C35)		BTX 8021B	
SAMPLED BY: (Print & Initial)		Date: 4/18/03		Time: 12:02	
SAMPLE SHIPPED BY: (Circle)		Date: 4/18/03		Time: 12:02	
FEDEX		BUS		UPS	
TETRA TECH CONTACT PERSON: F. L. Tovar		Date: 4/18/03		Time: 12:02	
RESULTS BY: F. L. Tovar		Date: 4/18/03		Time: 12:02	
RUSH CHARGES AUTHORIZED: Yes		No			

4.0e in back

Two dozen samples if TPH exceed 5000 mg/kg

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Res (G) BTEX highest TPH, Am detect BTEX, 17 Benzene over 10 mg/kg

Res (G) BTEX highest TPH, Am detect BTEX, 17 Benzene over 10 mg/kg

Order #: 9111903

Analysis Request of Chain of Custody Record

PAGE: 3 OF: 4

ANALYSIS REQUEST
(Circle or Specify Method No.)



TETRA TECH

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME: COG		SITE MANAGER: Tlc Tavaraz		PROJECT NAME: COG / Survey 942		PRESERVATIVE METHOD		NUMBER OF CONTAINERS		FILTERED (Y/N)		HCL		HNO3		ICE		NONE	
LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION													
215223	11/18	2009	S	X	X	AH-6 0-1' 6" BEB													
224						AH-6 1-1.5' 6" BEB													
225						AH-6 2-2.5' 6" BEB													
226						AH-6 3-3.5' 6" BEB													
227						AH-7 0-1' 6" BEB													
228						AH-7 1-1.5' 6" BEB													
229						AH-7 2-2.5' 6" BEB													
230						AH-7 3-3.5' 6" BEB													
231						AH-7 4-4.5' 6" BEB													
232						AH-8 0-1' 6" BEB													

RELINQUISHED BY: (Signature)		Date: 11/18/09	Time: 17:32	RECEIVED BY: (Signature)		Date: 11/18/09	Time: 17:32
RELINQUISHED BY: (Signature)		Date: 11/18/09	Time: 17:32	RECEIVED BY: (Signature)		Date: 11/18/09	Time: 17:32
RELINQUISHED BY: (Signature)		Date: 11/18/09	Time: 17:32	RECEIVED BY: (Signature)		Date: 11/18/09	Time: 17:32
RECEIVING LABORATORY: Tlc		RECEIVED BY: (Signature)					
ADDRESS: Midland State		CITY: Midland					
CONTACT: Tlc		PHONE: 432-682-4559					
SAMPLE CONDITION WHEN RECEIVED: 4.0c intact		REMARKS: Two deeper samples if TPH exceed 5000 mg/kg					

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Analysis Request of Chain of Custody Record

PAGE: 4 OF: 7

OF:

ANALYSIS REQUEST
(Circle or Specify Method No.)

TETRA TECH

**1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-**

(432) 682-4559 • Fax (432) 682-3946

[illegible]

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Summary Report

Ike Tavarez
Tetra Tech
1910 N. Big Spring Street
Midland, TX 79705

Report Date: December 9, 2009

Work Order: 9111903



Project Location: Eddy County, NM
Project Name: COG/Skelly 942
Project Number: 114-6400369

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
215203	AH-1 0-1' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215211	AH-3 0-1' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215214	AH-4 0-1' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215219	AH-5 0-1' 6 in. BEB	soil	2009-11-17	00:00	2009-11-18
215223	AH-6 0-1' 6 in. BEB	soil	2009-11-18	00:00	2009-11-18

Sample - Field Code	BTEX			
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)
215203 - AH-1 0-1' 6 in. BEB	2.11	35.0	38.4	46.4
215211 - AH-3 0-1' 6 in. BEB	20.8	102	76.4	79.2
215214 - AH-4 0-1' 6 in. BEB	3.40	38.4	39.7	40.0
215219 - AH-5 0-1' 6 in. BEB	1.68	53.2	73.8	79.9
215223 - AH-6 0-1' 6 in. BEB	3.49	75.2	78.3	90.7

Case Narrative

Samples for project COG/Skelly 942 were received by TraceAnalysis, Inc. on 2009-11-18 and assigned to work order 9111903. Samples for work order 9111903 were received intact at a temperature of 4.0 deg. C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	55928	2009-11-19 at 11:00	65456	2009-11-19 at 23:56

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9111903 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Report Date: December 9, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 4 of 8
Eddy County, NM

Analytical Report

Sample: 215203 - AH-1 0-1' 6 in. BEB

Laboratory: Midland
Analysis: BTEX
QC Batch: 65456
Prep Batch: 55928

Analytical Method: S 8021B
Date Analyzed: 2009-11-19
Sample Preparation: 2009-11-19

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		2.11	mg/Kg	50	0.0100
Toluene		35.0	mg/Kg	50	0.0100
Ethylbenzene		38.4	mg/Kg	50	0.0100
Xylene		46.4	mg/Kg	50	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		54.4	mg/Kg	50	50.0	109	64.4 - 111.2
4-Bromofluorobenzene (4-BFB)		40.3	mg/Kg	50	50.0	81	43.1 - 128.4

Sample: 215211 - AH-3 0-1' 6 in. BEB

Laboratory: Midland
Analysis: BTEX
QC Batch: 65456
Prep Batch: 55928

Analytical Method: S 8021B
Date Analyzed: 2009-11-19
Sample Preparation: 2009-11-19

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		20.8	mg/Kg	50	0.0100
Toluene		102	mg/Kg	50	0.0100
Ethylbenzene		76.4	mg/Kg	50	0.0100
Xylene		79.2	mg/Kg	50	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		52.3	mg/Kg	50	50.0	105	64.4 - 111.2
4-Bromofluorobenzene (4-BFB)		42.7	mg/Kg	50	50.0	85	43.1 - 128.4

Sample: 215214 - AH-4 0-1' 6 in. BEB

Laboratory: Midland
Analysis: BTEX
QC Batch: 65456
Prep Batch: 55928

Analytical Method: S 8021B
Date Analyzed: 2009-11-19
Sample Preparation: 2009-11-19

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

Report Date: December 9, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 5 of 8
Eddy County, NM

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		3.40	mg/Kg	50	0.0100
Toluene		38.4	mg/Kg	50	0.0100
Ethylbenzene		39.7	mg/Kg	50	0.0100
Xylene		40.0	mg/Kg	50	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		53.8	mg/Kg	50	50.0	108	64.4 - 111.2
4-Bromofluorobenzene (4-BFB)		39.6	mg/Kg	50	50.0	79	43.1 - 128.4

Sample: 215219 - AH-5 0-1' 6 in. BEB

Laboratory: Midland
Analysis: BTEX
QC Batch: 65456
Prep Batch: 55928

Analytical Method: S 8021B
Date Analyzed: 2009-11-19
Sample Preparation: 2009-11-19

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		1.68	mg/Kg	50	0.0100
Toluene		53.2	mg/Kg	50	0.0100
Ethylbenzene		73.8	mg/Kg	50	0.0100
Xylene		79.9	mg/Kg	50	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		53.8	mg/Kg	50	50.0	108	64.4 - 111.2
4-Bromofluorobenzene (4-BFB)		45.5	mg/Kg	50	50.0	91	43.1 - 128.4

Sample: 215223 - AH-6 0-1' 6 in. BEB

Laboratory: Midland
Analysis: BTEX
QC Batch: 65456
Prep Batch: 55928

Analytical Method: S 8021B
Date Analyzed: 2009-11-19
Sample Preparation: 2009-11-19

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		3.49	mg/Kg	50	0.0100
Toluene		75.2	mg/Kg	50	0.0100
Ethylbenzene		78.3	mg/Kg	50	0.0100
Xylene		90.7	mg/Kg	50	0.0100

Report Date: December 9, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 6 of 8
Eddy County, NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		53.6	mg/Kg	50	50.0	107	64.4 - 111.2
4-Bromofluorobenzene (4-BFB)		46.0	mg/Kg	50	50.0	92	43.1 - 128.4

Method Blank (1) QC Batch: 65456

QC Batch: 65456
Prep Batch: 55928

Date Analyzed: 2009-11-19
QC Preparation: 2009-11-19

Analyzed By: AG
Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00410	mg/Kg	0.01
Toluene		<0.00310	mg/Kg	0.01
Ethylbenzene		<0.00240	mg/Kg	0.01
Xylene		<0.00650	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.15	mg/Kg	1	2.00	108	64.9 - 122.7
4-Bromofluorobenzene (4-BFB)		1.31	mg/Kg	1	2.00	66	43.9 - 121.9

Laboratory Control Spike (LCS-1)

QC Batch: 65456
Prep Batch: 55928

Date Analyzed: 2009-11-19
QC Preparation: 2009-11-19

Analyzed By: AG
Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.92	mg/Kg	1	2.00	<0.00410	96	75.4 - 115.7
Toluene	1.90	mg/Kg	1	2.00	<0.00310	95	78.4 - 113.6
Ethylbenzene	1.86	mg/Kg	1	2.00	<0.00240	93	76 - 114.2
Xylene	5.57	mg/Kg	1	6.00	<0.00650	93	76.9 - 113.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.94	mg/Kg	1	2.00	<0.00410	97	75.4 - 115.7	1	20
Toluene	1.93	mg/Kg	1	2.00	<0.00310	96	78.4 - 113.6	2	20
Ethylbenzene	1.90	mg/Kg	1	2.00	<0.00240	95	76 - 114.2	2	20
Xylene	5.69	mg/Kg	1	6.00	<0.00650	95	76.9 - 113.6	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: December 9, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 7 of 8
Eddy County, NM

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.09	2.13	mg/Kg	1	2.00	104	106	65 - 122.9
4-Bromofluorobenzene (4-BFB)	1.34	1.37	mg/Kg	1	2.00	67	68	43.8 - 124.9

Matrix Spike (MS-1) Spiked Sample: 214963

QC Batch: 65456
Prep Batch: 55928

Date Analyzed: 2009-11-19
QC Preparation: 2009-11-19

Analyzed By: AG
Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.16	mg/Kg	1	2.00	<0.00410	108	57.7 - 140.7
Toluene	2.18	mg/Kg	1	2.00	<0.00310	109	53.4 - 146.6
Ethylbenzene	2.20	mg/Kg	1	2.00	<0.00240	110	62.1 - 141.6
Xylene	6.59	mg/Kg	1	6.00	<0.00650	110	61.2 - 142.7

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	¹ 1.29	mg/Kg	1	2.00	<0.00410	64	57.7 - 140.7	50	20
Toluene	² 1.32	mg/Kg	1	2.00	<0.00310	66	53.4 - 146.6	49	20
Ethylbenzene	³ 1.35	mg/Kg	1	2.00	<0.00240	68	62.1 - 141.6	48	20
Xylene	⁴ 4.03	mg/Kg	1	6.00	<0.00650	67	61.2 - 142.7	48	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.15	2.15	mg/Kg	1	2	108	108	62.7 - 119.6
4-Bromofluorobenzene (4-BFB)	1.39	1.39	mg/Kg	1	2	70	70	49.6 - 136.7

Standard (CCV-2)

QC Batch: 65456

Date Analyzed: 2009-11-19

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0961	96	80 - 120	2009-11-19
Toluene		mg/Kg	0.100	0.0945	94	80 - 120	2009-11-19
Ethylbenzene		mg/Kg	0.100	0.0925	92	80 - 120	2009-11-19

continued ...

¹MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

²MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

³MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

⁴MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

Report Date: December 9, 2009
114-6400369

Work Order: 9111903
COG/Skelly 942

Page Number: 8 of 8
Eddy County, NM

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Xylene		mg/Kg	0.300	0.274	91	80 - 120	2009-11-19

Standard (CCV-3)

QC Batch: 65456

Date Analyzed: 2009-11-19

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0972	97	80 - 120	2009-11-19
Toluene		mg/Kg	0.100	0.0966	97	80 - 120	2009-11-19
Ethylbenzene		mg/Kg	0.100	0.0940	94	80 - 120	2009-11-19
Xylene		mg/Kg	0.300	0.280	93	80 - 120	2009-11-19

Order #: 9111903

Analysis Request of Chain of Custody Record

PAGE: 3 OF 4

ANALYSIS REQUEST
(Circle or Specify Method No.)



TETRA TECH

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

SITE MANAGER:

Tlc Tavaraz

CLIENT NAME:

COG

PROJECT NAME:

COG / SW-14 942

PROJECT NO.:

1145400305

SAMPLE IDENTIFICATION

GRAB

COMP

MATRIX

TIME

DATE

2009

LAB I.D. NUMBER

215223

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Order #: 911903

Analysis Request of Chain of Custody Record

PAGE: 4 OF: 4



TETRA TECH

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME: C.066 SITE MANAGER: Tke Tovar

PROJECT NO.: 114-6440369

PROJECT NAME: C.066 / Shelly 942

LAB I.D. NUMBER DATE TIME MATRIX COMR GRAB SAMPLE IDENTIFICATION

NUMBER	DATE	MATRIX	COM	GRA	NUM	FLTR	HCL	HNO3	ICE	NONN	BTE	TPH	PAH	RCRA	TCL	TCL	TCL	RCI	GC.L	GC.L	PCB	Pest	Chlo	Gam	Alph	PLM	Major
215233	11/18	S	X	AH-B	1'-1.5'	6" BED	1		X													X					
234				AH-B	2'-2.5'	6" BED																					
235				AH-B	3'-3.5'	6" BED																					
236				AH-2	4'-4.5'	6" BED																					
237				AH-3	3'-3.5'	6" BED																					

RELINQUISHED BY: (Signature) Robert Leach	Date: 11/18/03 Time: 1:00	RECEIVED BY: (Signature) Tke Tovar	Date: 11/18/03 Time: 1:00
RELINQUISHED BY: (Signature)	Date: _____ Time: _____	RECEIVED BY: (Signature)	Date: _____ Time: _____
RELINQUISHED BY: (Signature)	Date: _____ Time: _____	RECEIVED BY: (Signature)	Date: _____ Time: _____
RECEIVING LABORATORY: Tke Tovar	Date: _____ Time: _____	RECEIVED BY: (Signature)	Date: _____ Time: _____
CITY: Midland STATE: TX ZIP: _____	PHONE: _____	DATE: _____	TIME: _____
SAMPLE CONDITION WHEN RECEIVED: 4.0 c intact			
REMARKS: Two deeper samples if TPH exceeds 5000 mg/kg			

RESULTS BY: Tke Tovar	DATE: 11/18/03 TIME: 1:00
AIRBILL #:	OTHER:
TETRA TECH CONTACT PERSON: Tke Tovar	RESULTS BY:
RUSH CHARGES AUTHORIZED: Yes	NO

Please fill out all copies - Laboratory retains Yellow copy - Return original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Summary Report

Ike Tavarez
Tetra Tech
1910 N. Big Spring Street
Midland, TX 79705

Report Date: December 31, 2009

Work Order: 9121601



Project Location: Eddy County, NM
Project Name: COG/Skelly 942
Project Number: 114-6400369

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
217285	CS-1 0-1' 1' BEB	soil	2009-12-15	00:00	2009-12-15
217287	CS-2 0-1' 3' BEB	soil	2009-12-15	00:00	2009-12-15
217288	CS-3 0-1' 1' BEB	soil	2009-12-15	00:00	2009-12-15
217290	CS-4 0-1' 1.5' BEB	soil	2009-12-15	00:00	2009-12-15
217291	CS-5 0-1' 1' BEB	soil	2009-12-15	00:00	2009-12-15
217292	CS-5 1-1.5' 1' BEB	soil	2009-12-15	00:00	2009-12-15
217293	CS-6 0-1' 1' BEB	soil	2009-12-15	00:00	2009-12-15
217295	CS-7 0-1' 3' BEB	soil	2009-12-15	00:00	2009-12-15
217296	CS-8 0-1' 1' BEB	soil	2009-12-15	00:00	2009-12-15

Sample - Field Code	BTEX			
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)
217285 - CS-1 0-1' 1' BEB	<0.0100	<0.0100	<0.0100	0.205
217287 - CS-2 0-1' 3' BEB	<0.0100	<0.0100	<0.0100	<0.0100
217288 - CS-3 0-1' 1' BEB	0.668	12.6	9.44	18.4
217290 - CS-4 0-1' 1.5' BEB	<0.0100	0.0641	0.390	0.741
217291 - CS-5 0-1' 1' BEB	4.02	58.0	74.0	82.5
217292 - CS-5 1-1.5' 1' BEB	<0.0200	<0.0200	0.0239	0.0433
217293 - CS-6 0-1' 1' BEB	0.140	11.3	18.6	19.2
217295 - CS-7 0-1' 3' BEB	<0.0100	<0.0100	<0.0100	<0.0100
217296 - CS-8 0-1' 1' BEB	<0.0100	0.290	1.86	1.72



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019

HUB: 1752439743100-86536
NCTRCA WFWB38444Y0909

DBE: VN 20657

NELAP Certifications

Lubbock: T104704219-08-TX
LELAP-02003
Kansas E-10317

El Paso: T104704221-08-TX
LELAP-02002

Midland: T104704392-08-TX

Analytical and Quality Control Report

Ike Tavaréz
Tetra Tech
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: December 31, 2009

Work Order: 9121601



Project Location: Eddy County, NM
Project Name: COG/Skelly 942
Project Number: 114-6400369

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
217285	CS-1 0-1' 1' BEB	soil	2009-12-15	00:00	2009-12-15
217287	CS-2 0-1' 3' BEB	soil	2009-12-15	00:00	2009-12-15
217288	CS-3 0-1' 1' BEB	soil	2009-12-15	00:00	2009-12-15
217290	CS-4 0-1' 1.5' BEB	soil	2009-12-15	00:00	2009-12-15
217291	CS-5 0-1' 1' BEB	soil	2009-12-15	00:00	2009-12-15
217292	CS-5 1-1.5' 1' BEB	soil	2009-12-15	00:00	2009-12-15
217293	CS-6 0-1' 1' BEB	soil	2009-12-15	00:00	2009-12-15
217295	CS-7 0-1' 3' BEB	soil	2009-12-15	00:00	2009-12-15
217296	CS-8 0-1' 1' BEB	soil	2009-12-15	00:00	2009-12-15

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 12 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project COG/Skelly 942 were received by TraceAnalysis, Inc. on 2009-12-15 and assigned to work order 9121601. Samples for work order 9121601 were received intact at a temperature of 4.0 deg. C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	56577	2009-12-21 at 15:00	66187	2009-12-21 at 12:51
BTEX	S 8021B	56739	2009-12-30 at 15:26	66373	2009-12-30 at 15:26

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9121601 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Report Date: December 31, 2009
114-6400369

Work Order: 9121601
COG/Skelly 942

Page Number: 4 of 12
Eddy County, NM

Analytical Report

Sample: 217285 - CS-1 0-1' 1' BEB

Laboratory: Midland
Analysis: BTEX
QC Batch: 66187
Prep Batch: 56577

Analytical Method: S 8021B
Date Analyzed: 2009-12-21
Sample Preparation: 2009-12-21

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		0.205	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.54	mg/Kg	1	2.00	127	64.4 - 141.2
4-Bromofluorobenzene (4-BFB)		2.29	mg/Kg	1	2.00	114	43.1 - 158.4

Sample: 217287 - CS-2 0-1' 3' BEB

Laboratory: Midland
Analysis: BTEX
QC Batch: 66187
Prep Batch: 56577

Analytical Method: S 8021B
Date Analyzed: 2009-12-21
Sample Preparation: 2009-12-21

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.62	mg/Kg	1	2.00	131	64.4 - 141.2
4-Bromofluorobenzene (4-BFB)		2.25	mg/Kg	1	2.00	112	43.1 - 158.4

Sample: 217288 - CS-3 0-1' 1' BEB

Laboratory: Midland
Analysis: BTEX
QC Batch: 66187
Prep Batch: 56577

Analytical Method: S 8021B
Date Analyzed: 2009-12-21
Sample Preparation: 2009-12-21

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

Report Date: December 31, 2009
114-6400369

Work Order: 9121601
COG/Skelly 942

Page Number: 5 of 12
Eddy County, NM

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		0.668	mg/Kg	50	0.0100
Toluene		12.6	mg/Kg	50	0.0100
Ethylbenzene		9.44	mg/Kg	50	0.0100
Xylene		18.4	mg/Kg	50	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		57.5	mg/Kg	50	50.0	115	64.4 - 141.2
4-Bromofluorobenzene (4-BFB)		56.4	mg/Kg	50	50.0	113	43.1 - 158.4

Sample: 217290 - CS-4 0-1' 1.5' BEB

Laboratory: Midland
Analysis: BTEX
QC Batch: 66187
Prep Batch: 56577

Analytical Method: S 8021B
Date Analyzed: 2009-12-21
Sample Preparation: 2009-12-21

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		0.0641	mg/Kg	1	0.0100
Ethylbenzene		0.390	mg/Kg	1	0.0100
Xylene		0.741	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.80	mg/Kg	1	2.00	140	64.4 - 141.2
4-Bromofluorobenzene (4-BFB)		2.97	mg/Kg	1	2.00	148	43.1 - 158.4

Sample: 217291 - CS-5 0-1' 1' BEB

Laboratory: Midland
Analysis: BTEX
QC Batch: 66187
Prep Batch: 56577

Analytical Method: S 8021B
Date Analyzed: 2009-12-21
Sample Preparation: 2009-12-21

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		4.02	mg/Kg	20	0.0100
Toluene		58.0	mg/Kg	20	0.0100
Ethylbenzene		74.0	mg/Kg	20	0.0100
Xylene		82.5	mg/Kg	20	0.0100

Report Date: December 31, 2009
114-6400369

Work Order: 9121601
COG/Skelly 942

Page Number: 6 of 12
Eddy County, NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		22.9	mg/Kg	20	20.0	114	64.4 - 141.2
4-Bromofluorobenzene (4-BFB)	¹	35.8	mg/Kg	20	20.0	179	43.1 - 158.4

Sample: 217292 - CS-5 1-1.5' 1' BEB

Laboratory: Lubbock
Analysis: BTEX
QC Batch: 66373
Prep Batch: 56739

Analytical Method: S 8021B
Date Analyzed: 2009-12-30
Sample Preparation: 2009-12-30

Prep Method: S 5035
Analyzed By: ER
Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0200	mg/Kg	1	0.0200
Toluene		<0.0200	mg/Kg	1	0.0200
Ethylbenzene	B	0.0239	mg/Kg	1	0.0200
Xylene	B	0.0433	mg/Kg	1	0.0200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.13	mg/Kg	1	2.00	106	71.8 - 112
4-Bromofluorobenzene (4-BFB)		2.17	mg/Kg	1	2.00	108	72.8 - 115

Sample: 217293 - CS-6 0-1' 1' BEB

Laboratory: Midland
Analysis: BTEX
QC Batch: 66187
Prep Batch: 56577

Analytical Method: S 8021B
Date Analyzed: 2009-12-21
Sample Preparation: 2009-12-21

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		0.140	mg/Kg	10	0.0100
Toluene		11.3	mg/Kg	10	0.0100
Ethylbenzene		18.6	mg/Kg	10	0.0100
Xylene		19.2	mg/Kg	10	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		11.4	mg/Kg	10	10.0	114	64.4 - 141.2
4-Bromofluorobenzene (4-BFB)		13.8	mg/Kg	10	10.0	138	43.1 - 158.4

¹ High surrogate recovery due to peak interference.

Report Date: December 31, 2009
114-6400369

Work Order: 9121601
COG/Skelly 942

Page Number: 7 of 12
Eddy County, NM

Sample: 217295 - CS-7 0-1' 3' BEB

Laboratory: Midland
Analysis: BTEX
QC Batch: 66187
Prep Batch: 56577

Analytical Method: S 8021B
Date Analyzed: 2009-12-21
Sample Preparation: 2009-12-21

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.40	mg/Kg	1	2.00	120	64.4 - 141.2
4-Bromofluorobenzene (4-BFB)		2.06	mg/Kg	1	2.00	103	43.1 - 158.4

Sample: 217296 - CS-8 0-1' 1' BEB

Laboratory: Midland
Analysis: BTEX
QC Batch: 66187
Prep Batch: 56577

Analytical Method: S 8021B
Date Analyzed: 2009-12-21
Sample Preparation: 2009-12-21

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		0.290	mg/Kg	1	0.0100
Ethylbenzene		1.86	mg/Kg	1	0.0100
Xylene		1.72	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.51	mg/Kg	1	2.00	126	64.4 - 141.2
4-Bromofluorobenzene (4-BFB)		3.06	mg/Kg	1	2.00	153	43.1 - 158.4

Method Blank (1) QC Batch: 66187

QC Batch: 66187
Prep Batch: 56577

Date Analyzed: 2009-12-21
QC Preparation: 2009-12-21

Analyzed By: AG
Prepared By: AG

Report Date: December 31, 2009
114-6400369

Work Order: 9121601
COG/Skelly 942

Page Number: 8 of 12
Eddy County, NM

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00410	mg/Kg	0.01
Toluene		<0.00310	mg/Kg	0.01
Ethylbenzene		<0.00240	mg/Kg	0.01
Xylene		<0.00650	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.40	mg/Kg	1	2.00	120	64.9 - 142.7
4-Bromofluorobenzene (4-BFB)		1.95	mg/Kg	1	2.00	98	43.9 - 141.9

Method Blank (1) QC Batch: 66373

QC Batch: 66373
Prep Batch: 56739

Date Analyzed: 2009-12-30
QC Preparation: 2009-12-30

Analyzed By: ER
Prepared By: ER

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00331	mg/Kg	0.02
Toluene		0.0135	mg/Kg	0.02
Ethylbenzene		0.0210	mg/Kg	0.02
Xylene		0.0493	mg/Kg	0.02

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.96	mg/Kg	1	2.00	98	71.8 - 112
4-Bromofluorobenzene (4-BFB)		1.99	mg/Kg	1	2.00	100	72.8 - 115

Laboratory Control Spike (LCS-1)

QC Batch: 66187
Prep Batch: 56577

Date Analyzed: 2009-12-21
QC Preparation: 2009-12-21

Analyzed By: AG
Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.87	mg/Kg	1	2.00	<0.00410	94	75.4 - 115.7
Toluene	1.95	mg/Kg	1	2.00	<0.00310	98	78.4 - 113.6
Ethylbenzene	1.96	mg/Kg	1	2.00	<0.00240	98	76 - 114.2
Xylene	5.84	mg/Kg	1	6.00	<0.00650	97	76.9 - 113.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: December 31, 2009
114-6400369

Work Order: 9121601
COG/Skelly 942

Page Number: 9 of 12
Eddy County, NM

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.84	mg/Kg	1	2.00	<0.00410	92	75.4 - 115.7	2	20
Toluene	1.93	mg/Kg	1	2.00	<0.00310	96	78.4 - 113.6	1	20
Ethylbenzene	1.93	mg/Kg	1	2.00	<0.00240	96	76 - 114.2	2	20
Xylene	5.76	mg/Kg	1	6.00	<0.00650	96	76.9 - 113.6	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.42	2.32	mg/Kg	1	2.00	121	116	65 - 142.9
4-Bromofluorobenzene (4-BFB)	2.13	2.04	mg/Kg	1	2.00	106	102	43.8 - 144.9

Laboratory Control Spike (LCS-1)

QC Batch: 66373
Prep Batch: 56739

Date Analyzed: 2009-12-30
QC Preparation: 2009-12-30

Analyzed By: ER
Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.05	mg/Kg	1	2.00	<0.00331	102	78.9 - 113
Toluene	1.99	mg/Kg	1	2.00	0.0135	100	78.3 - 116
Ethylbenzene	2.01	mg/Kg	1	2.00	0.021	100	79.1 - 117
Xylene	6.22	mg/Kg	1	6.00	0.0493	104	79.6 - 116

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	2.04	mg/Kg	1	2.00	<0.00331	102	78.9 - 113	0	20
Toluene	1.99	mg/Kg	1	2.00	0.0135	100	78.3 - 116	0	20
Ethylbenzene	1.97	mg/Kg	1	2.00	0.021	98	79.1 - 117	2	20
Xylene	6.20	mg/Kg	1	6.00	0.0493	103	79.6 - 116	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.02	2.01	mg/Kg	1	2.00	101	100	70.8 - 111
4-Bromofluorobenzene (4-BFB)	2.03	2.03	mg/Kg	1	2.00	102	102	68.3 - 117

Matrix Spike (MS-1) Spiked Sample: 217295

QC Batch: 66187
Prep Batch: 56577

Date Analyzed: 2009-12-21
QC Preparation: 2009-12-21

Analyzed By: AG
Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.88	mg/Kg	1	2.00	<0.00410	94	57.7 - 140.7
Toluene	2.00	mg/Kg	1	2.00	<0.00310	100	53.4 - 146.6
Ethylbenzene	2.05	mg/Kg	1	2.00	<0.00240	102	62.1 - 141.6
Xylene	6.12	mg/Kg	1	6.00	<0.00650	102	61.2 - 142.7

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	2.01	mg/Kg	1	2.00	<0.00410	100	57.7 - 140.7	7	20
Toluene	2.15	mg/Kg	1	2.00	<0.00310	108	53.4 - 146.6	7	20
Ethylbenzene	2.20	mg/Kg	1	2.00	<0.00240	110	62.1 - 141.6	7	20
Xylene	6.56	mg/Kg	1	6.00	<0.00650	109	61.2 - 142.7	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.57	2.62	mg/Kg	1	2	128	131	62.7 - 139.6
4-Bromofluorobenzene (4-BFB)	2.12	2.15	mg/Kg	1	2	106	108	49.6 - 146.7

Matrix Spike (MS-1) Spiked Sample: 218603

QC Batch: 66373
Prep Batch: 56739

Date Analyzed: 2009-12-30
QC Preparation: 2009-12-30

Analyzed By: ER
Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.03	mg/Kg	1	2.00	<0.00331	102	61.5 - 134
Toluene	2.21	mg/Kg	1	2.00	<0.00528	110	64.2 - 143
Ethylbenzene	2.40	mg/Kg	1	2.00	<0.00448	120	67.7 - 152
Xylene	7.19	mg/Kg	1	6.00	0.0433	119	67.8 - 152

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	2.01	mg/Kg	1	2.00	<0.00331	100	61.5 - 134	1	20
Toluene	2.25	mg/Kg	1	2.00	<0.00528	112	64.2 - 143	2	20
Ethylbenzene	2.40	mg/Kg	1	2.00	<0.00448	120	67.7 - 152	0	20
Xylene	7.16	mg/Kg	1	6.00	0.0433	119	67.8 - 152	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.20	2.19	mg/Kg	1	2	110	110	65.3 - 134

continued ...

Report Date: December 31, 2009
114-6400369

Work Order: 9121601
COG/Skelly 942

Page Number: 11 of 12
Eddy County, NM

matrix spikes continued ...

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
4-Bromofluorobenzene (4-BFB)	2.43	2.34	mg/Kg	1	2	122	117	61.9 - 143

Standard (CCV-1)

QC Batch: 66187

Date Analyzed: 2009-12-21

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0909	91	80 - 120	2009-12-21
Toluene		mg/Kg	0.100	0.0947	95	80 - 120	2009-12-21
Ethylbenzene		mg/Kg	0.100	0.0951	95	80 - 120	2009-12-21
Xylene		mg/Kg	0.300	0.284	95	80 - 120	2009-12-21

Standard (CCV-2)

QC Batch: 66187

Date Analyzed: 2009-12-21

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0828	83	80 - 120	2009-12-21
Toluene		mg/Kg	0.100	0.0865	86	80 - 120	2009-12-21
Ethylbenzene		mg/Kg	0.100	0.0859	86	80 - 120	2009-12-21
Xylene		mg/Kg	0.300	0.256	85	80 - 120	2009-12-21

Standard (CCV-3)

QC Batch: 66187

Date Analyzed: 2009-12-21

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0947	95	80 - 120	2009-12-21
Toluene		mg/Kg	0.100	0.0985	98	80 - 120	2009-12-21
Ethylbenzene		mg/Kg	0.100	0.0969	97	80 - 120	2009-12-21
Xylene		mg/Kg	0.300	0.289	96	80 - 120	2009-12-21

Standard (CCV-1)

QC Batch: 66373

Date Analyzed: 2009-12-30

Analyzed By: ER

Report Date: December 31, 2009
114-6400369

Work Order: 9121601
COG/Skelly 942

Page Number: 12 of 12
Eddy County, NM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.103	103	80 - 120	2009-12-30
Toluene		mg/Kg	0.100	0.102	102	80 - 120	2009-12-30
Ethylbenzene		mg/Kg	0.100	0.102	102	80 - 120	2009-12-30
Xylene		mg/Kg	0.300	0.315	105	80 - 120	2009-12-30

Standard (CCV-2)

QC Batch: 66373

Date Analyzed: 2009-12-30

Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0989	99	80 - 120	2009-12-30
Toluene		mg/Kg	0.100	0.0985	98	80 - 120	2009-12-30
Ethylbenzene		mg/Kg	0.100	0.0981	98	80 - 120	2009-12-30
Xylene		mg/Kg	0.300	0.301	100	80 - 120	2009-12-30

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 2

ANALYSIS REQUEST
Circle or Specify Method

TETRA TECH

**1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946**

CLIENT NAME: COG		SITE MANAGER: Ike Tavaraz											
PROJECT NO.: 114-6400369		PROJECT NAME: COG/Skelly 942 TB											
LAB I.D. NUMBER	DATE 2009	TIME 12/5	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION Edley Co, NM	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD				
									HCL	HN03	ICE	NONE	
27285	12/5		5		X	05-1 0-1' 1' BEB	1				X		
286						05-1 1'-1.5' 1' BEB							
287						05-2 0-1' 3' BEB							
288						05-3 0-1' 1' BEB							
289						05-3 1'-1.5' 1' BEB							
290						05-4 0-1' 1.5' BEB							
291						05-5 0-1' 1' BEB							
292						05-5 1'-1.5' 1' BEB							
293						05-6 0-1' 1' BEB							
294						05-6 1'-1.5' 1' BEB							

RELINQUISHED BY: (Signature) *[Signature]* Date: 12/15/09

RELINQUISHED BY: (Signature) *[Signature]* Date: 12/15/09

RELINQUISHED BY: (Signature) *[Signature]* Date: 12/15/09

RECEIVED BY: (Signature) *[Signature]* Date: 12/15/09

RECEIVED BY: (Signature) *[Signature]* Date: 12/15/09

RECEIVED BY: (Signature) *[Signature]* Date: 12/15/09

RECEIVING LABORATORY: *Trent*

ADDRESS: *Midland*

CITY: *Midland* STATE: *TX* ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature) *[Signature]* Date: 12-30-09

RECEIVED BY: (Signature) *[Signature]* Date: 12-30-09

RECEIVED BY: (Signature) *[Signature]* Date: 12-30-09

SAMPLE CONDITION WHEN RECEIVED: *40°C intact*

REMARKS: *Hold additional samples for further instructions*

DEC 25 1964

55.9

vs for further in

REMARKS: Hold additional sample

SAMPLE CONDITION WHEN RECEIVED:
40°C intact

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tatra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

LS 25868194

217292 X 44125 - 149018

BTX-Lbb.

Summary Report

Ike Tavaréz
Tetra Tech
1910 N. Big Spring Street
Midland, TX 79705

Report Date: January 25, 2010

Work Order: 10011804



Project Location: Eddy Co., NM
Project Name: COG/Skelly 942 TB (Spill 5)
Project Number: 114-6400407

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
219872	AH-1 0-1'	soil	2010-01-12	00:00	2010-01-15
219873	AH-1 1-1.5'	soil	2010-01-12	00:00	2010-01-15
219874	AH-1 2-2.5'	soil	2010-01-12	00:00	2010-01-15
219875	AH-1 3-3.5'	soil	2010-01-12	00:00	2010-01-15
219876	AH-1 4-4.5'	soil	2010-01-12	00:00	2010-01-15
219877	AH-1 5-5.5'	soil	2010-01-12	00:00	2010-01-15
219878	T-1 6'	soil	2010-01-13	00:00	2010-01-15
219879	T-1 7'	soil	2010-01-13	00:00	2010-01-15

Sample - Field Code	BTEX				TPH DRO - NEW	TPH GRO
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
219872 - AH-1 0-1'	268	594	323	342		
219875 - AH-1 3-3.5'	87.2	246	146	153		
219878 - T-1 6'	3.37	39.9	34.9	37.9		
219879 - T-1 7'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00

Sample: 219872 - AH-1 0-1'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 219873 - AH-1 1-1.5'

Param	Flag	Result	Units	RL
Chloride		718	mg/Kg	4.00

Sample: 219874 - AH-1 2-2.5'

Param	Flag	Result	Units	RL
Chloride		861	mg/Kg	4.00

Sample: 219875 - AH-1 3-3.5'

Param	Flag	Result	Units	RL
Chloride		753	mg/Kg	4.00

Sample: 219876 - AH-1 4-4.5'

Param	Flag	Result	Units	RL
Chloride		1530	mg/Kg	4.00

Sample: 219877 - AH-1 5-5.5'

Param	Flag	Result	Units	RL
Chloride		1290	mg/Kg	4.00

Sample: 219878 - T-1 6'

Param	Flag	Result	Units	RL
Chloride		374	mg/Kg	4.00

Sample: 219879 - T-1 7'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019

HUB: 1752439743100-86536
NCTRCA WFWB38444Y0909

DBE: VN 20657

NELAP Certifications

Lubbock: T104704219-08-TX
LELAP-02003
Kansas E-10317

El Paso: T104704221-08-TX
LELAP-02002

Midland: T104704392-08-TX

Analytical and Quality Control Report

Ike Tavaréz
Tetra Tech
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: January 25, 2010

Work Order: 10011804



Project Location: Eddy Co., NM
Project Name: COG/Skelly 942 TB (Spill 5)
Project Number: 114-6400407

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
219872	AH-1 0-1'	soil	2010-01-12	00:00	2010-01-15
219873	AH-1 1-1.5'	soil	2010-01-12	00:00	2010-01-15
219874	AH-1 2-2.5'	soil	2010-01-12	00:00	2010-01-15
219875	AH-1 3-3.5'	soil	2010-01-12	00:00	2010-01-15
219876	AH-1 4-4.5'	soil	2010-01-12	00:00	2010-01-15
219877	AH-1 5-5.5'	soil	2010-01-12	00:00	2010-01-15
219878	T-1 6'	soil	2010-01-13	00:00	2010-01-15
219879	T-1 7'	soil	2010-01-13	00:00	2010-01-15

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch

basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 17 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project COG/Skelly 942 TB (Spill 5) were received by TraceAnalysis, Inc. on 2010-01-15 and assigned to work order 10011804. Samples for work order 10011804 were received intact at a temperature of 4.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	57175	2010-01-19 at 14:00	66862	2010-01-19 at 11:58
BTEX	S 8021B	57264	2010-01-22 at 14:00	66976	2010-01-22 at 12:08
Chloride (Titration)	SM 4500-Cl B	57185	2010-01-20 at 12:55	66902	2010-01-21 at 10:08
TPH DRO - NEW	Mod. 8015B	57147	2010-01-18 at 10:36	66823	2010-01-18 at 10:36
TPH GRO	S 8015B	57175	2010-01-19 at 14:00	66863	2010-01-19 at 12:26

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 10011804 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Report Date: January 25, 2010
114-6400407

Work Order: 10011804
COG/Skelly 942 TB (Spill 5)

Page Number: 4 of 17
Eddy Co., NM

Analytical Report

Sample: 219872 - AH-1 0-1'

Laboratory: Midland
Analysis: BTEX
QC Batch: 66976
Prep Batch: 57264

Analytical Method: S 8021B
Date Analyzed: 2010-01-22
Sample Preparation: 2010-01-22

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		268	mg/Kg	50	0.0100
Toluene		594	mg/Kg	50	0.0100
Ethylbenzene		323	mg/Kg	50	0.0100
Xylene		342	mg/Kg	50	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		46.4	mg/Kg	50	50.0	93	64.4 - 141.2
4-Bromofluorobenzene (4-BFB)	¹	108	mg/Kg	50	50.0	216	43.1 - 158.4

Sample: 219872 - AH-1 0-1'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 66902
Prep Batch: 57185

Analytical Method: SM 4500-Cl B
Date Analyzed: 2010-01-21
Sample Preparation: 2010-01-20

Prep Method: N/A
Analyzed By: AR
Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 219873 - AH-1 1-1.5'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 66902
Prep Batch: 57185

Analytical Method: SM 4500-Cl B
Date Analyzed: 2010-01-21
Sample Preparation: 2010-01-20

Prep Method: N/A
Analyzed By: AR
Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		718	mg/Kg	50	4.00

¹High surrogate recovery due to peak interference.

Report Date: January 25, 2010
114-6400407

Work Order: 10011804
COG/Skelly 942 TB (Spill 5)

Page Number: 5 of 17
Eddy Co., NM

Sample: 219874 - AH-1 2-2.5'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-01-21	Analyzed By:	AR
QC Batch:	66902	Sample Preparation:	2010-01-20	Prepared By:	AR
Prep Batch:	57185				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		861	mg/Kg	50	4.00

Sample: 219875 - AH-1 3-3.5'

Laboratory:	Midland	Analytical Method:	S 8021B	Prep Method:	S 5035
Analysis:	BTEX	Date Analyzed:	2010-01-22	Analyzed By:	AG
QC Batch:	66976	Sample Preparation:	2010-01-22	Prepared By:	AG
Prep Batch:	57264				

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		87.2	mg/Kg	20	0.0100
Toluene		246	mg/Kg	20	0.0100
Ethylbenzene		146	mg/Kg	20	0.0100
Xylene		153	mg/Kg	20	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		18.9	mg/Kg	20	20.0	94	64.4 - 141.2
4-Bromofluorobenzene (4-BFB)	²	45.2	mg/Kg	20	20.0	226	43.1 - 158.4

Sample: 219875 - AH-1 3-3.5'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-01-21	Analyzed By:	AR
QC Batch:	66902	Sample Preparation:	2010-01-20	Prepared By:	AR
Prep Batch:	57185				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		753	mg/Kg	50	4.00

²High surrogate recovery due to peak interference.

Report Date: January 25, 2010
114-6400407

Work Order: 10011804
COG/Skelly 942 TB (Spill 5)

Page Number: 6 of 17
Eddy Co., NM

Sample: 219876 - AH-1 4-4.5'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-01-21	Analyzed By:	AR
QC Batch:	66902	Sample Preparation:	2010-01-20	Prepared By:	AR
Prep Batch:	57185				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1530	mg/Kg	50	4.00

Sample: 219877 - AH-1 5-5.5'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-01-21	Analyzed By:	AR
QC Batch:	66902	Sample Preparation:	2010-01-20	Prepared By:	AR
Prep Batch:	57185				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1290	mg/Kg	50	4.00

Sample: 219878 - T-1 6'

Laboratory:	Midland	Analytical Method:	S 8021B	Prep Method:	S 5035
Analysis:	BTEX	Date Analyzed:	2010-01-22	Analyzed By:	AG
QC Batch:	66976	Sample Preparation:	2010-01-22	Prepared By:	AG
Prep Batch:	57264				

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		3.37	mg/Kg	5	0.0100
Toluene		39.9	mg/Kg	5	0.0100
Ethylbenzene		34.9	mg/Kg	5	0.0100
Xylene		37.9	mg/Kg	5	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		3.87	mg/Kg	5	5.00	77	64.4 - 141.2
4-Bromofluorobenzene (4-BFB)	3	10.5	mg/Kg	5	5.00	210	43.1 - 158.4

³High surrogate recovery due to peak interference.

Report Date: January 25, 2010
114-6400407

Work Order: 10011804
COG/Skelly 942 TB (Spill 5)

Page Number: 7 of 17
Eddy Co., NM

Sample: 219878 - T-1 6'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 66902
Prep Batch: 57185

Analytical Method: SM 4500-Cl B
Date Analyzed: 2010-01-21
Sample Preparation: 2010-01-20

Prep Method: N/A
Analyzed By: AR
Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		374	mg/Kg	50	4.00

Sample: 219879 - T-1 7'

Laboratory: Midland
Analysis: BTEX
QC Batch: 66862
Prep Batch: 57175

Analytical Method: S 8021B
Date Analyzed: 2010-01-19
Sample Preparation: 2010-01-19

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.98	mg/Kg	1	2.00	99	64.4 - 141.2
4-Bromofluorobenzene (4-BFB)		1.93	mg/Kg	1	2.00	96	43.1 - 158.4

Sample: 219879 - T-1 7'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 66902
Prep Batch: 57185

Analytical Method: SM 4500-Cl B
Date Analyzed: 2010-01-21
Sample Preparation: 2010-01-20

Prep Method: N/A
Analyzed By: AR
Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Report Date: January 25, 2010
114-6400407

Work Order: 10011804
COG/Skelly 942 TB (Spill 5)

Page Number: 8 of 17
Eddy Co., NM

Sample: 219879 - T-1 7'

Laboratory: Midland
Analysis: TPH DRO - NEW
QC Batch: 66823
Prep Batch: 57147

Analytical Method: Mod. 8015B
Date Analyzed: 2010-01-18
Sample Preparation: 2010-01-18

Prep Method: N/A
Analyzed By: kg
Prepared By: kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		98.8	mg/Kg	1	100	99	70 - 130

Sample: 219879 - T-1 7'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 66863
Prep Batch: 57175

Analytical Method: S 8015B
Date Analyzed: 2010-01-19
Sample Preparation: 2010-01-19

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.12	mg/Kg	1	2.00	106	65.3 - 145
4-Bromofluorobenzene (4-BFB)		2.03	mg/Kg	1	2.00	102	61.7 - 131.1

Method Blank (1) QC Batch: 66823

QC Batch: 66823
Prep Batch: 57147

Date Analyzed: 2010-01-18
QC Preparation: 2010-01-18

Analyzed By: kg
Prepared By: kg

Parameter	Flag	MDL Result	Units	RL
DRO		<5.86	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		91.6	mg/Kg	1	100	92	70 - 130

Report Date: January 25, 2010
114-6400407

Work Order: 10011804
COG/Skelly 942 TB (Spill 5)

Page Number: 9 of 17
Eddy Co., NM

Method Blank (1) QC Batch: 66862

QC Batch: 66862
Prep Batch: 57175

Date Analyzed: 2010-01-19
QC Preparation: 2010-01-19

Analyzed By: AG
Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00410	mg/Kg	0.01
Toluene		<0.00310	mg/Kg	0.01
Ethylbenzene		<0.00240	mg/Kg	0.01
Xylene		<0.00650	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.03	mg/Kg	1	2.00	102	64.9 - 142.7
4-Bromofluorobenzene (4-BFB)		1.90	mg/Kg	1	2.00	95	43.9 - 141.9

Method Blank (1) QC Batch: 66863

QC Batch: 66863
Prep Batch: 57175

Date Analyzed: 2010-01-19
QC Preparation: 2010-01-19

Analyzed By: AG
Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
GRO		<0.396	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.19	mg/Kg	1	2.00	110	66.2 - 145
4-Bromofluorobenzene (4-BFB)		1.98	mg/Kg	1	2.00	99	62 - 120.5

Method Blank (1) QC Batch: 66902

QC Batch: 66902
Prep Batch: 57185

Date Analyzed: 2010-01-21
QC Preparation: 2010-01-20

Analyzed By: AR
Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 66976

QC Batch: 66976
Prep Batch: 57264

Date Analyzed: 2010-01-22
QC Preparation: 2010-01-22

Analyzed By: AG
Prepared By: AG

Report Date: January 25, 2010
114-6400407

Work Order: 10011804
COG/Skelly 942 TB (Spill 5)

Page Number: 10 of 17
Eddy Co., NM

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00410	mg/Kg	0.01
Toluene		<0.00310	mg/Kg	0.01
Ethylbenzene		<0.00240	mg/Kg	0.01
Xylene		<0.00650	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.93	mg/Kg	1	2.00	96	64.9 - 142.7
4-Bromofluorobenzene (4-BFB)		1.90	mg/Kg	1	2.00	95	43.9 - 141.9

Laboratory Control Spike (LCS-1)

QC Batch: 66823
Prep Batch: 57147

Date Analyzed: 2010-01-18
QC Preparation: 2010-01-18

Analyzed By: kg
Prepared By: kg

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	284	mg/Kg	1	250	<5.86	114	57.4 - 133.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	295	mg/Kg	1	250	<5.86	118	57.4 - 133.4	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	102	105	mg/Kg	1	100	102	105	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 66862
Prep Batch: 57175

Date Analyzed: 2010-01-19
QC Preparation: 2010-01-19

Analyzed By: AG
Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.02	mg/Kg	1	2.00	<0.00410	101	75.4 - 115.7
Toluene	1.85	mg/Kg	1	2.00	<0.00310	92	78.4 - 113.6
Ethylbenzene	1.76	mg/Kg	1	2.00	<0.00240	88	76 - 114.2
Xylene	5.34	mg/Kg	1	6.00	<0.00650	89	76.9 - 113.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: January 25, 2010
114-6400407

Work Order: 10011804
COG/Skelly 942 TB (Spill 5)

Page Number: 11 of 17
Eddy Co., NM

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	2.06	mg/Kg	1	2.00	<0.00410	103	75.4 - 115.7	2	20
Toluene	1.89	mg/Kg	1	2.00	<0.00310	94	78.4 - 113.6	2	20
Ethylbenzene	1.80	mg/Kg	1	2.00	<0.00240	90	76 - 114.2	2	20
Xylene	5.44	mg/Kg	1	6.00	<0.00650	91	76.9 - 113.6	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.94	1.92	mg/Kg	1	2.00	97	96	65 - 142.9
4-Bromofluorobenzene (4-BFB)	1.97	1.96	mg/Kg	1	2.00	98	98	43.8 - 144.9

Laboratory Control Spike (LCS-1)

QC Batch: 66863
Prep Batch: 57175

Date Analyzed: 2010-01-19
QC Preparation: 2010-01-19

Analyzed By: AG
Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	16.9	mg/Kg	1	20.0	<0.396	84	52.5 - 114.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	17.6	mg/Kg	1	20.0	<0.396	88	52.5 - 114.3	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.10	2.12	mg/Kg	1	2.00	105	106	66.2 - 148.7
4-Bromofluorobenzene (4-BFB)	2.03	2.06	mg/Kg	1	2.00	102	103	64.1 - 127.4

Laboratory Control Spike (LCS-1)

QC Batch: 66902
Prep Batch: 57185

Date Analyzed: 2010-01-21
QC Preparation: 2010-01-20

Analyzed By: AR
Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	102	mg/Kg	1	100	<2.18	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: January 25, 2010
114-6400407

Work Order: 10011804
COG/Skelly 942 TB (Spill 5)

Page Number: 12 of 17
Eddy Co., NM

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.9	mg/Kg	1	100	<2.18	100	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 66976
Prep Batch: 57264

Date Analyzed: 2010-01-22
QC Preparation: 2010-01-22

Analyzed By: AG
Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.95	mg/Kg	1	2.00	<0.00410	98	75.4 - 115.7
Toluene	1.83	mg/Kg	1	2.00	<0.00310	92	78.4 - 113.6
Ethylbenzene	1.81	mg/Kg	1	2.00	<0.00240	90	76 - 114.2
Xylene	5.44	mg/Kg	1	6.00	<0.00650	91	76.9 - 113.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.94	mg/Kg	1	2.00	<0.00410	97	75.4 - 115.7	0	20
Toluene	1.82	mg/Kg	1	2.00	<0.00310	91	78.4 - 113.6	0	20
Ethylbenzene	1.78	mg/Kg	1	2.00	<0.00240	89	76 - 114.2	2	20
Xylene	5.40	mg/Kg	1	6.00	<0.00650	90	76.9 - 113.6	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.88	1.80	mg/Kg	1	2.00	94	90	65 - 142.9
4-Bromofluorobenzene (4-BFB)	1.96	1.88	mg/Kg	1	2.00	98	94	43.8 - 144.9

Matrix Spike (MS-1) Spiked Sample: 219597

QC Batch: 66823
Prep Batch: 57147

Date Analyzed: 2010-01-18
QC Preparation: 2010-01-18

Analyzed By: kg
Prepared By: kg

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	323	mg/Kg	1	250	<5.86	129	35.2 - 167.1

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	328	mg/Kg	1	250	<5.86	131	35.2 - 167.1	2	20

Report Date: January 25, 2010
114-6400407

Work Order: 10011804
COG/Skelly 942 TB (Spill 5)

Page Number: 13 of 17
Eddy Co., NM

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	97.8	98.0	mg/Kg	1	100	98	98	70 - 130

Matrix Spike (MS-1) Spiked Sample: 219728

QC Batch: 66862
Prep Batch: 57175

Date Analyzed: 2010-01-19
QC Preparation: 2010-01-19

Analyzed By: AG
Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.42	mg/Kg	1	2.00	<0.00410	121	57.7 - 140.7
Toluene	2.26	mg/Kg	1	2.00	<0.00310	113	53.4 - 146.6
Ethylbenzene	2.22	mg/Kg	1	2.00	<0.00240	111	62.1 - 141.6
Xylene	6.71	mg/Kg	1	6.00	<0.00650	112	61.2 - 142.7

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	2.32	mg/Kg	1	2.00	<0.00410	116	57.7 - 140.7	4	20
Toluene	2.17	mg/Kg	1	2.00	<0.00310	108	53.4 - 146.6	4	20
Ethylbenzene	2.12	mg/Kg	1	2.00	<0.00240	106	62.1 - 141.6	5	20
Xylene	6.42	mg/Kg	1	6.00	<0.00650	107	61.2 - 142.7	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.93	2.11	mg/Kg	1	2	96	106	62.7 - 139.6
4-Bromofluorobenzene (4-BFB)	1.93	2.11	mg/Kg	1	2	96	106	49.6 - 146.7

Matrix Spike (MS-1) Spiked Sample: 219879

QC Batch: 66863
Prep Batch: 57175

Date Analyzed: 2010-01-19
QC Preparation: 2010-01-19

Analyzed By: AG
Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	18.6	mg/Kg	1	20.0	<0.396	93	10 - 198.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	19.2	mg/Kg	1	20.0	<0.396	96	10 - 198.3	3	20

Report Date: January 25, 2010
114-6400407

Work Order: 10011804
COG/Skelly 942 TB (Spill 5)

Page Number: 14 of 17
Eddy Co., NM

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.29	2.13	mg/Kg	1	2	114	106	65.5 - 143
4-Bromofluorobenzene (4-BFB)	2.33	2.21	mg/Kg	1	2	116	110	58.6 - 140

Matrix Spike (MS-1) Spiked Sample: 219879

QC Batch: 66902
Prep Batch: 57185

Date Analyzed: 2010-01-21
QC Preparation: 2010-01-20

Analyzed By: AR
Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	10000	mg/Kg	100	10000	<218	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	10200	mg/Kg	100	10000	<218	100	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 219995

QC Batch: 66976
Prep Batch: 57264

Date Analyzed: 2010-01-22
QC Preparation: 2010-01-22

Analyzed By: AG
Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.05	mg/Kg	1	2.00	<0.00410	102	57.7 - 140.7
Toluene	1.96	mg/Kg	1	2.00	<0.00310	98	53.4 - 146.6
Ethylbenzene	1.96	mg/Kg	1	2.00	<0.00240	98	62.1 - 141.6
Xylene	5.94	mg/Kg	1	6.00	<0.00650	99	61.2 - 142.7

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	2.19	mg/Kg	1	2.00	<0.00410	110	57.7 - 140.7	7	20
Toluene	2.10	mg/Kg	1	2.00	<0.00310	105	53.4 - 146.6	7	20
Ethylbenzene	2.13	mg/Kg	1	2.00	<0.00240	106	62.1 - 141.6	8	20
Xylene	6.46	mg/Kg	1	6.00	<0.00650	108	61.2 - 142.7	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: January 25, 2010
114-6400407

Work Order: 10011804
COG/Skelly 942 TB (Spill 5)

Page Number: 15 of 17
Eddy Co., NM

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.85	1.79	mg/Kg	1	2	92	90	62.7 - 139.6
4-Bromofluorobenzene (4-BFB)	1.91	1.84	mg/Kg	1	2	96	92	49.6 - 146.7

Standard (CCV-2)

QC Batch: 66823

Date Analyzed: 2010-01-18

Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	290	116	80 - 120	2010-01-18

Standard (CCV-3)

QC Batch: 66823

Date Analyzed: 2010-01-18

Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	295	118	80 - 120	2010-01-18

Standard (CCV-2)

QC Batch: 66862

Date Analyzed: 2010-01-19

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.101	101	80 - 120	2010-01-19
Toluene		mg/Kg	0.100	0.0926	93	80 - 120	2010-01-19
Ethylbenzene		mg/Kg	0.100	0.0879	88	80 - 120	2010-01-19
Xylene		mg/Kg	0.300	0.265	88	80 - 120	2010-01-19

Standard (CCV-3)

QC Batch: 66862

Date Analyzed: 2010-01-19

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.101	101	80 - 120	2010-01-19
Toluene		mg/Kg	0.100	0.0915	92	80 - 120	2010-01-19
Ethylbenzene		mg/Kg	0.100	0.0859	86	80 - 120	2010-01-19

continued ...

Report Date: January 25, 2010
114-6400407

Work Order: 10011804
COG/Skelly 942 TB (Spill 5)

Page Number: 16 of 17
Eddy Co., NM

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Xylene		mg/Kg	0.300	0.259	86	80 - 120	2010-01-19

Standard (CCV-2)

QC Batch: 66863

Date Analyzed: 2010-01-19

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.994	99	80 - 120	2010-01-19

Standard (CCV-3)

QC Batch: 66863

Date Analyzed: 2010-01-19

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.13	113	80 - 120	2010-01-19

Standard (ICV-1)

QC Batch: 66902

Date Analyzed: 2010-01-21

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2010-01-21

Standard (CCV-1)

QC Batch: 66902

Date Analyzed: 2010-01-21

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.0	99	85 - 115	2010-01-21

Standard (CCV-2)

QC Batch: 66976

Date Analyzed: 2010-01-22

Analyzed By: AG

Report Date: January 25, 2010
114-6400407

Work Order: 10011804
COG/Skelly 942 TB (Spill 5)

Page Number: 17 of 17
Eddy Co., NM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0969	97	80 - 120	2010-01-22
Toluene		mg/Kg	0.100	0.0906	91	80 - 120	2010-01-22
Ethylbenzene		mg/Kg	0.100	0.0899	90	80 - 120	2010-01-22
Xylene		mg/Kg	0.300	0.271	90	80 - 120	2010-01-22

Standard (CCV-3)

QC Batch: 66976

Date Analyzed: 2010-01-22

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0994	99	80 - 120	2010-01-22
Toluene		mg/Kg	0.100	0.0949	95	80 - 120	2010-01-22
Ethylbenzene		mg/Kg	0.100	0.0929	93	80 - 120	2010-01-22
Xylene		mg/Kg	0.300	0.281	94	80 - 120	2010-01-22

Analysis Request of Chain of Custody Record

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